



**A STUDY OF CONSUMER BEHAVIOR WITH  
SPECIAL REFERENCE TO ELECTRONIC MONEY  
IN BUNDELKHAND REGION OF U.P.**

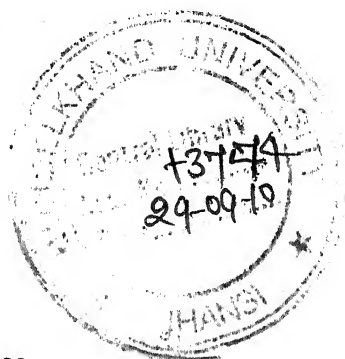
**THESIS  
SUBMITTED FOR THE AWARD OF THE DEGREE OF  
DOCTOR OF PHILOSOPHY**

**IN  
Banking, Economics and Finance**

**Under the supervision of**

**DR. C.B. SINGH**

**Senior Lecturer,  
Department of Economics & Finance  
Bundelkhand University, Jhansi**



**Submitted By**

**SHAMBHU NATH SINGH**

**Lecturer, Economics & Finance**

**DEPARTMENT OF ECONOMICS & FINANCE,  
BUNDELKHAND UNIVERSITY,  
JHANSI (INDIA)**

**2009**

## DECLARATION

I, Shambhu Nath Singh, the research scholar hereby declare that this research entitled, **“A Study of Consumer Behavior with Special Reference to Electronic Money in Bundelkhand Region of U.P.”** is an original work of mine and has not been submitted earlier.

April 28, 2009

  
(SHAMBHU NATH SINGH)



**Dr. C.B.Singh**  
Senior Lecturer



**Department of Economics & Finance**  
**Bundelkhand University, Jhansi**

## **CERTIFICATE**

This is to certify that Shambhu Nath Singh has completed his Doctoral Dissertation entitled "**A Study of Consumer Behavior with Special Reference to Electronic Money in Bundelkhand Region of U.P.**" under my supervision and guidance in the Department of Economics & Finance, Bundelkhand University, Jhansi.

To the best of my knowledge it is an original research work based on the data and facts collected by the researcher himself. He has also fulfilled all the conditions laid down in the relevant ordinances. The thesis is worthy of consideration for the award of the Degree of Doctor of Philosophy in Banking, Economics & finance.

**Date: 28-04-2009**

**Place: Jhansi**

**Dr. C. B. Singh**

**(Research Supervisor)**

# Acknowledgement

The present research work on “A Study of Consumer Behavior with Special Reference to Electronic Money in Bundelkhand Region of U.P.” is being submitted under the learned guidance of **Dr. C. B. Singh, Senior Lecturer, Institute of Economics & Finance, Bundelkhand University Jhansi**. First and foremost, I would express my deep sense of gratitude to him for his intellectual supervision, expert comments, preeminent interest and unflinching support. His painstaking supervision and guidance have helped in improving the quality of the work.

I am grateful to the God who has ever been showing his blessings on me in the form of helpful and cooperative friends, colleagues and well-wisher around. It is his Blessings that this work has finally taken the shape of a Thesis.

I would also like to place on record my gratitude to senior colleagues in the university for assistance at various stages and encouragement provided by them in completing the work. I owe my deep gratitude to **Prof. M. L. Maurya, Dean & Head, Institute of Economics and Finance**, who encouraged me to undertake this work. I am also very thankful to my junior colleagues for his sincere and necessary support at every stage of the study. I am also very grateful to library staffs, who helped me a lot by providing relevant literature and information related to the topics.

I shall fail my sacred moral duty if I don't express heartfelt gratification to my senior colleague **Dr. Mohd. Shamim Ansari** who showed me the path as a lighthouse of knowledge. I am sincerely indebted for his painstaking

effort to go through thesis patiently and providing me valuable advice to improve the quality of the work.

My regards to parents, who have always been my inspiration and a positive force behind me in every thick and thin of my life. I thank my in-laws, brothers, and sisters for their love and cooperation.

My sincere thanks are tendered to my wife *Amita* who has taken real pains and tolerated me patiently during the tenure of my work as I was not able to devote enough time to her.

Last but not the least, it is my bounding duty to express my gratitude towards everyone whose guidance and help has made this successful.

*(Shambhu Nath Singh)*

# Preface

Consumer behavior is that subset of human behavior which is concerned with decisions and acts of individuals in purchasing and using products. The consumption process of consumer may involve three different people, the decision maker, the purchaser who actually acquires the goods and the user of the product and services. The purchase decision can involve many variables, including price, quality, availability and services. Information regarding these inputs can be obtained from several sources. Several major disciplines, including Sociology, Psychology, and learning theory, have made major contributions to understanding of consumer behavior. As far as the Indian consumer, the country is vast geographically, the consumers of India are scattered over a vast territory. As the country is marked by great diversity in climate, religion, language, literacy level, customs and calendars, lifestyles and economic status, the consumers of India present a complex economic status, the consumers of India present a complex and bizarre group. The heterogeneity holds many implications for marketers, especially to those going for national marketing.

Nowadays banks are more and more zealous for providing core banking services in India. From a practical point of view there is much to be achieved for implementing international standards as conditions of various banks are different in nature viz. infrastructure, capital adequacy and human relation norms. A customer is the focus in banking. He is both an input and a resource in the service production process. The interests of the banker and his customer are to be mutually shared. The relationships have to be enduring. A customer has to be treated as an important part of a bank so that the banker can feel the impact of his direct contact. It is a common

perception that banks provide services. To be true, banks offer an output by adding value to it, like convenience, security, comfort and flexibility. The ultimate objective of a banker is profitability through customer satisfaction. Society moved from barter system to common medium of exchange the money and further to bank money. Now we are experiencing the introduction of debit cards, credit cards and smart cards as an extension of bank money, which is better known as plastic money. Plastic money has certain qualities, which make it more empowering over and above bank money through cheques. It ensures instant debit and credit to the bank accounts of purchaser of goods and its seller. Bankers benefit as the customer is happier and visits less for withdrawal and deposit purchases. Reputation of a bank is important because of intangibility of the products it provides to its customers. The felling of satisfaction of employees through satisfied customers enables them to contribute more. A banker should maintain customer satisfaction level through service recovery.

In a growing number of countries bank and other commercial service providers are finding new ways to make money delivering financial services. Branchless Banking represents a significantly cheaper alternative to conventional branch-based banking that allows financial services outside traditional bank premises by using delivery channels like retail agents, mobile phone etc. In branchless banking, customers do not deal with a bank, nor do they maintain a bank account. A bank may not be involved at all. Instead, customers deal with a non-bank firm either a mobile network operator or prepaid card issuer and retail agents serve as the point of customer contact. Rather than deposit money into and withdraw money from a bank account, customers exchange their cash for

Electronic money stored in a virtual electronic money account on the non-bank's server, which is not linked to a bank account in the individual's name.

Thus, in the age of globalization which is characterized by high degree competition on global level, high degree of mobility of people, and scarcity of time the providers of goods and services innovated the concept of Electronic-money for the convenience of consumers.

It is in this background the present study has been designed. All necessary and relevant knowledge to understand the research concept is incorporated in this thesis. This research work is divided into seven chapters and all relevant knowledge that are essential to understand the research concepts are incorporated in the study. The first chapter deals with the "Introduction", which covers a brief summary of the consumer behavior, Electronic Money and introduces the topic and objectives of research, hypotheses and significance of the study.

The second chapter analyses the review of existing literature on Consumer Behavior, Electronic Banking & its services and research methodology for the study.

In the third chapter, "Indian Consumers and its Behavior", a detailed discussion about Consumer Behavior, changing consumer behavior with respect to time, application to customer behavior, and public policy and consumer protection.

The fourth chapter, "Development of E-Money with Technological Changes" introduces the Electronic Money and deals with its origin, growth, development and achievements.

In the fifth chapter, "Impact of E-Money on Consumer Behavior" examines both positive and negative impacts of Electronic Money on Consumer Behavior.

The sixth chapter, "Analysis and Interpretation" is based on primary data collected from customers and bankers and evaluates the behaviors of consumers towards the services of Electronic Money and also evaluates the behaviors of consumers from the banks points of views. This chapter brings together important finding of the study with the help of which the hypotheses have been tested.

Finally, the seventh chapter of the work gives, "Summary, Conclusion and Policy Implication". I hope the suggestions recommended in the study will help in improving the services of Electronic Money to the banks.

## LIST OF ABBREVIATIONS

ATM	Automated Teller Machine
AMCs	Annual Maintenance Contracts
ACH	Automated Clearing House
B2B	Business to Business
B2C	Business to Customer
BPM	Business Process Management
BIS	Bank For International Settlements
BACS	Banker's Automated Clearing System
BB	Branchless Banking
CBS	Core Banking Services/Solution
CRM	Customer Relationship Management
CSR	Customer Service Representative
CMS	Cash Management Services
CHIPS	Clearing House Inter-bank Payments
CTT	Cheques Truncation Technology
CUG	Closed User Group
DNSS	Deferred Net Settlement System
DSL	Digital Subscriber Line
E-Money	Electronic Money
E-Banking	Electronic Banking
EFT	Electronic Fund Transfer
ECS	Electronic Clearing Services
EDP	Electronic Data Processing
E-CRM	Electronic Customer Relationship Management
EDI	Electronic Data Interchange
ECP	Electronic Check Presentment
EBPP	Electronic Bill Presentment and Payment



EDC	Electronic Data Capture
EMV	Expected Monetary Value
EU	European Union
FDI	Foreign Direct Investment
FLE	Front Line Employees
FEDI	Financial Electronic Data Interchange
GSM	Global System for Mobile Communication
GPRS	General Packet Radio Service
HDFC	Housing Development Financing Corporation
IT	Information Technology
ICICI	Industrial Credit and Investment Corporation of India
IRC	Inter Relay Chat
IBPP	Internet Billing Presentment and Payment
INFINET	Indian Financial Network
LAN	Local Area Network
MPP	Management Policies and Practices
MCIF	Marketing Customer Information File
MICR	Magnetic Ink Character Recognition
NBFC	Non Banking Financial Corporation
NPAAs	Non-Performing Assets
NEFT	Net Electronic Fund Transfer
OBC	Oriental Bank of Commerce
PKI	Public Key Information
PNB	Punjab National Bank
PSB	Public/Private Sector Bank
POS	Point of Scale/Sale
PCMCIA	Personal Computer Memory Card International Association
PIN	Personal Identification Number

RTGS	Real Time Gross Settlement
SPNS	Shared Payment Network System
SBI	State Bank of India
SET	Secure Electronic Transaction
SWIFT	Society for Worldwide Internet Financial Telecommunications
SFNB	Security First Network Bank
TBM	Total Branch Mechanization
UTI	Unit Trust of India
VRS	Voice Response System
VSAT	Very Small Operative Terminal
WAP	Wireless Application Protocol
WWW	World Wide Web

## LIST OF TABLES

Table No.	PARTICULARS	Page No.
2.1	Bundelkhand and KAVAL Region of Study	34
2.2	Sample Distribution in Bundelkhand Region	35
2.3	Sample Distribution in KAVAL Region	36
2.4	Calculations for ANOVA	37
2.5	ANOVA-Table (one-way)	37
4.1	The Bank-Led Model	170
4.2	The Nonbank-Led Model	172
6.1	The Details Regarding General Profile of the consumers in Bundelkhand Region	213
6.2	Years of living in Bundelkhand Region	217
6.3	Account holders in banks	218
6.4	Sector wise account holders in banks	218
6.5	No. of times, the consumers is visited to bank in a month	219
6.6	Customer guidance (clarification of doubts), and support	220
6.7	The politeness and hospitality	221
6.8	Handling of customer complaints/Grievances	222
6.9	Method of imposing service charges, fines and penalties	223
6.10	Speed, promptness and accuracy in transactions	224
6.11	Confidentiality of account and transactions	225
6.12	Variety of E-money services offered	226
6.13	Goodwill and reputation of the bank	227
6.14	The infrastructure facilities like E-payment, ATM, Credit card	228
6.15	Banks network and facilities to operate account from any part of the country/globe	229
6.16	Mobile banking, E-banking, internet banking and other latest technologies	230
6.17	Convenience in operating the account	231
6.18	Communication and providing prompt information	232
6.19	Customer care facilities provided by the service provider	233

6.20	E-money transactions more convenient than physical money transactions	234
6.21	E-money is the best form of transactions	235
6.22	E-money is the safest and the most secured system of transactions	236
6.23	E-money service provider load many hidden charges	237
6.24	Private players are providing better products in the area of E-money services than Public sector players	238
6.25	Anytime, Anywhere, the services of E-money can be used	239
6.26	Awareness about Internet banking, Electronic money and Plastic cards	240
6.27	Types of E-money used by the consumers	241
6.28	Factors that motivated to consumers for using E-money	242
6.29	Preference Level of transactions through E-money	243
6.30	Willingness about the services of E-money provided by the banks	244
6.31	Plastic cards are successful replacing the traditional mode of payments	245
6.32	Preference modes of payments	246
6.33	Various purpose of using E-money	247
6.34	Purpose of using E-payment	248
6.35	Impact of Electronic Money services day by day	249
6.36	Usages ATM cards for inter-bank transaction	250
6.37	Multipurpose usages of Debit and Credit cards	251
6.38	Best mode of the E-payment	252
6.39	Usages of debit card& E-money has overcome the delayed process of cheque clearance	253
6.40	Usages of the debit card have facilitated	254
6.41	Preference to SMS facility for E-payment	255
6.42	Awareness about PIN	256
6.43	Various services of E-money	257
6.44	Most popular uses of E-payments	258
6.45	Satisfaction Level with the different forms of E-money	258

6.46	Satisfaction with the service provider in the area of E-money	259
6.47	Satisfaction Level towards the service provider in the area of E-money	260
6.48	Level of Awareness of Consumers and Electronic money users.	262
6.49	Calculation of Chi- Square	263
6.50	Sex and E-money users	263
6.51	Age and E-money users	264
6.52	Education and E-money users	264
6.53	Occupation and E-money users	265
6.54	Monthly Income and E-money users	265
6.55	Confidentiality of account and financial transaction towards E- money users	266
6.56	Comparison of Consumer Awareness towards E-Money Services between Bundelkhand Region and KAVAL Region	267
6.57	Comparison of Confidentiality of their Account and Financial Transactions towards E-Money Services between Bundelkhand Region and KAVAL Region	268
6.58	Comparison of E-Money users between Bundelkhand Region and KAVAL Region	270
7.1	Level of Awareness of Consumers and Electronic money users	289
7.2.1	Sex and E-money users	290
7.2.2	Age and E-money users	290
7.2.3	Education and E-money users	290
7.2.4	Occupation and E-money users	291
7.2.5	Monthly Income and E-money users	291
7.3.1	Confidentiality of account and financial transaction towards E- money users	292
7.4	Comparison of Consumer Awareness towards E-Money Services between Bundelkhand Region and KAVAL Region	293
7.5	Comparison of Confidentiality of their Account and Financial Transactions towards E-Money Services between Bundelkhand Region and KAVAL Region	294
7.6	Comparison of E-Money users between Bundelkhand Region and KAVAL Region	295

## LIST OF DIAGRAMS

Diagram No.	PARTICULARS	Page No.
6.1	Sex wise classification of the respondents	214
6.2	Age group wise classification of the respondents	214
6.3	Educational qualification wise classification of the respondents	215
6.4	Occupational status wise classification of the respondents	216
6.5	Monthly Income wise classification of the respondents	216
6.6	Years of Living in Bundelkhand region	217
6.7	Sector wise account holder in the banks	219
6.8	No. of times, the consumers are visited to bank in a month	220
6.9	Customer guidance and support	221
6.10	The politeness and hospitality	222
6.11	Handling of customer complaints/Grievances	223
6.12	Method of imposing service charges, fines and penalties	224
6.13	Speed, promptness and accuracy in transactions	225
6.14	Confidentiality of account and transactions	226
6.15	Variety of E-money services offered	227
6.16	Goodwill and reputation of the bank	228
6.17	The infrastructure facilities like E-payment, ATM, Credit card	229
6.18	Banks network and facilities to operate account from any part of the country/globe	230
6.19	Mobile banking, E-banking, internet banking and other latest technologies	231
6.20	Convenience in operating the account	232
6.21	Communication and providing prompt information	233
6.22	Customer care facilities provided by the service provider	234
6.23	E-money transactions more convenient than physical money transactions	235
6.24	E-money is the best form of transactions	236
6.25	E-money is the safest and the most secured system of transactions	237

6.26	E-money service provider load many hidden charges	238
6.27	Private players are providing better products in the area of E-money services than Public sector players	239
6.28	Anytime, Anywhere, the services of E-money can be used	240
6.29	Awareness about Internet banking, Electronic money and Plastic cards	241
6.30	Types of E-money used by the consumers	242
6.31	Factors that motivated to consumers for using E-money	243
6.32	Preference Level of transactions through E-money	244
6.33	Willingness about the services of E-money provided by the banks.	245
6.34	Plastic cards are successful replacing the traditional mode of payments.	246
6.35	Preference modes of payments	247
6.36	Various purpose of using E-money	248
6.37	Purpose of using E-payment	249
6.38	Impact of Electronic Money services day by day	250
6.39	Usages ATM cards for inter-bank transaction	251
6.40	Multipurpose usages of Debit and Credit cards	252
6.41	Best mode of the E-payment	253
6.42	Usages of debit card& E-money has overcome the delayed process of cheque clearance	254
6.43	Usages of the debit card have facilitated	255
6.44	Preference to SMS facility for E-payment	256
6.45	Awareness about PIN	257
6.46	Most popular uses of E-payments	258
6.47	Satisfaction Level with the different forms of E-money	259
6.48	Satisfaction with the service provider in the area of E-money	260
6.49	Satisfaction Level towards the service provider in the area of E-money.	261

# CONTENTS

<b>Chapter Number</b>	<b>Chapter Title</b>	<b>Page Number</b>
	<b>Acknowledgement</b>	i-ii
	<b>Preface</b>	iii-vi
	<b>List of Abbreviations</b>	vii-ix
	<b>List of Tables</b>	x-xii
	<b>List of Diagrams</b>	xiii-xiv
<b>Chapter 1</b>	<b>Introduction</b>	1-32
<b>Chapter 2</b>	<b>Research Methodology and Review of Existing Literature</b>	33-94
<b>Chapter 3</b>	<b>Indian Consumers and its Behavior</b>	95-132
<b>Chapter 4</b>	<b>Development of E-Money with Technological Changes</b>	133-177
<b>Chapter 5</b>	<b>Impact of E-Money on Consumer Behavior</b>	178-211
<b>Chapter 6</b>	<b>Analysis and Interpretation</b>	212-274
<b>Chapter 7</b>	<b>Summary, Conclusion and Policy Implication</b>	275-309
	<b>Bibliography</b>	310-312
	<b>Annexure 1</b>	xvi-xix
	<b>Annexure 2</b>	xx-xxi



# *Chapter 1*

## **Introduction**

# **Introduction**

In ancient economy people had limited wants. We have observed a wide range of transition in the economy. In a barter economy, people were largely self-dependent and economic activities were restricted within the local market. Thus, barter system was sufficient. However, with the expansion of economic activities, money was introduced as a medium of exchange. The increased economic activities forced business community and other participants to accelerate the productivity. This also brought increased mobility of people, higher degree of competition. The increased level of competition forced the providers of goods and services, to change their profit oriented attitude to customer oriented attitude. In order to survive in the market, understanding the customer's needs is prerequisite. Thus, the need for studying consumer behavior was widely felt by the providers of goods and services.

The starting point for any type of behavior, including consumer behavior, is unsatisfied need. The buyer will not be motivated to buy unless there is a perceived need for the product. Thus, identifying customer needs is prerequisite for successful behavior. If a bank product does not fill a need or is marketed to satisfy a need that customers do not feel, then the product will not be marketed successfully.

The bank marketer has the critical task of discovering the needs of the market and those that the bank's products serve. Insufficiently satisfied

needs also might be the result of dissatisfaction with an existing product or service. In the case of banking, customer dissatisfaction with the level of service is often the top most cited reason why people change banks.

The need for banking services is closely related to the satisfaction of needs at all levels; satisfying a need frequently involves making a purchase, which requires money-either cash or credit. Checking accounts offer a convenient way of paying for goods, clothing and shelter with assurance that money is kept in a safe place. Credit cards enable customers to respond quickly to needs that arise unexpectedly. Savings accounts are a form of security and a way to prepare for emergencies. Installments in loans give people to access large amounts of money to buy products and make their homes.

The explosive growth in the development of new technology, in banking, has enabled banks to handle their work more efficiently and to become less reliant on labour. As a result, many new bank service delivery mechanisms are introduced because they suit the banking industry's needs, not necessarily the customer's. Sometimes, considerable time is required to explain the bank customers that how new services, which require a change in banking behavior will meet their needs.

### **1.1 CONSUMER BEHAVIOR: -**

Marketing concept starts with the consumer needs and ends in consumer behavior with meeting these needs. Every action of a person is based on needs. The real problem is to learn what a customer takes into consideration when he chooses the products and services of a particular brand. Such a study is concerned with consumer behavior.

The study of consumer behavior is not altogether a recent activity. While it has blossomed into a much studied science only during the last two decades, it finds mention even in the earliest of treatises “The wealth of nations” by Adam Smith published in 1776.

It was given due place in the microeconomic theory and attracted the attention of economists. However, at that time it was purely a part of economic theory, viewing the behavior of the consumer as a simple result of economic compulsion.

In the early theory and the treatments given in the various treatises that followed, simplistic assumptions were made that consumers pursue their needs with limited incomes and are compelled to exercise choices to derive optimized satisfaction level utilizing the available incomes. In these treatments the satisfaction derived and the utility levels arrived at by a consumer from increased consumptions were analyzed. Much of the theory was built on such analyses but the underlying assumption was that the consumer behavior is an un-disciplinary economic activity.

By the later part of the twentieth century as marketing became a more important activity, marketers were seeking answers for many questions they had about how their consumers behaved. The early economic theories of consumer behavior were found to be inadequate. It was realized that consumer behavior is really much more complex and interdisciplinary, and it involved concepts from various human behavior sciences. The effects of Sociology, Psychology, and Anthropology besides Economics, on the

behavior of consumers were recognized and the science of Consumer Behavior took root.

Ever since marketing became universal, marketers were in a constant quest to find out why certain products achieved better acceptance than others. In the initial stage they investigated only the product and compared competing product benefits to establish the rationale for the acceptance or rejection. However, they found that even identically placed products had different receptions. There were instances where apparently superior products fared badly while fewer products thrived. It did not take long to realize that the purchase behavior of consumers was based on several internal factors as well as external factors. This in turn led to the study of the internal factors in a more detailed fashion.

All of us are consumers. We consume things of daily use; we also consume and buy the products according to our needs, preferences and buying power. These can be consumable goods, durable goods, specialty goods or industrial goods and financial products.

What we buy, how we buy, where and when we buy, in how much quantity we buy depend on our perception, self concept, social and cultural background and our age and family cycle, our attitudes, beliefs values, motivation personality, social class and many other factors that are both internal and external to us. While buying, we also consider whether to buy or not to buy and from which source or seller to buy. In some societies, there is a lot of affluence and these societies can afford to buy in

greater quantities and at shorter intervals. In poor societies, the consumer can barely meet his barest needs.

After early 1960's, the consumer have become more conscious of their responsibilities and are trying to gather as much information as possible for taking decision regarding purchasing or using of goods and services. This consumption made the firms revisit their earlier strategies and take note of the behavior of consumers towards their products and services.

The marketers therefore try to understand the needs of different consumers and having understood their different behavior, which requires in-depth study of their internal and external environment, they formulate their plans for marketing.

Consumer Behavior is a very young discipline in management. Various scholars and academicians concentrated on it at a much later stage. It was during 1950's that marketing concept developed, and thus the need to study the behavior of consumers was recognized. Marketing starts with the need of the consumers and ends with their satisfaction. When every thing revolves round the customers then the study of consumer behavior becomes a necessity. It begins with the buying of goods. Goods can be bought individually or in groups. Goods can be bought under stress (to satisfy an immediate need), for comfort and luxury in small quantities or in bulk. For all this, exchanges are required. This exchange is usually between the seller and the buyer. It can also be between consumers.

Consumer behavior can be defined as the decision-making process and physical activities involved in acquiring, evaluating, using and disposing of goods and services. This definition clearly brings out that a process of buying starts in the minds of the consumer, which leads to the finding of alternatives between products that can be acquired with their relative advantages and disadvantages. This leads to internal and external research. Then it follows a process of decision making for purchase and using the goods, and then the post purchase behavior which is also very important, because it gives a clue to the marketers whether their product has been a success or not.

A consumer is anyone who engages himself in physical activities, of evaluating, acquiring, using or disposing of goods and services, while a customer is one who actually purchases a product or service from a particular organization or a shop. A customer is always defined in terms of a specific product or company. However, the term consumer is a broader term which emphasizes not only the actual buyer or customer, but also its users i.e. consumers. Thus, consumer behaviors are a complex, dynamic multidimensional process, and all marketing decisions are based on assumptions about consumer behavior.

Consumer behavior is the buzzword now. Firm or company who underestimate their consumers will have no chance to serve them. Competition is intensifying day-by-day and the firms have to evolve the strategies based on the behavior of the consumer, on a continuous basis, to stay ahead and win the race.

Consumer behavior now as a discipline of study continues to attract the attention of the firms, consumers and students of human behavior. In fact, one should remember that every one in this universe, in some form or the other is a consumer of some product or service. These findings are generated by studying consumer. The behavior could be utilized by marketers to come out with their plans of action, and try to revitalize and review the interest of consumers in their products and services. Also new products, which the consumers require, could be introduced by the marketers based on the research findings generated.

Hence consumer's behavior is that subset of human behavior which is concerned with decision and acts of individuals in purchasing and using products. The consumption process of consumers may involve three different people the decision maker, the purchaser who actually acquires the goods, and the users of the products or services. The purchase decision can evolve many variables, including price, quality, availability and service. Information regarding these inputs can be obtained from several sources. Several majors' disciplines including Sociology, Psychology and learning theory have made major contribution to our understanding of consumer behavior. As concerned with Indian consumer, the country is vast geographically, the consumers of India are scattered over a vast territory. As the country is marked by great diversity in climate, religion, language, literacy level, custom and calendars, lifestyles and economic status, the consumers of India present a complex and bizarre group. The heterogeneity holds many implications for marketers, especially to those going for national marketing. Thus, in the age of globalization which is characterized by high degree of competition at global level, high degree of



mobility of people, and scarcity of time, the providers of goods and services, innovated the concept of E-money for the convenience of consumers.

## **1.2 ELECTRONIC MONEY: -**

Money is a widely accepted medium of exchange. With the advent of computer, internet and e-commerce, a process of shifting significantly from paper money to electronic money, has become a circulating medium of exchange. This can be used on the internet to facilitate new age commerce. The transformation from a paper based payment system to an electronic payment system reduced transaction costs. The internet offer the prospect of a highly cost effective payment system for low value transactions and technology is able to offer nearly instantaneous settlement of transactions to achieve an objective.

Security and safety issues need to be successfully addressed without losing the benefits that accrue from the internet open structure. Digital cash make transaction less expensive because the cost of transferring digital cash via the internet is cheaper than through the traditional banking system. Digital cash is borderless. The cost of transfer of money within states is almost equal to the cost of transfer with other states. The cost of international money transfer now much higher than transfer within a given state, will be reduced dramatically. Digital cash payments can be used by any one with access to the internet and an internet based bank. The consequence of these effects is the enlargement of new business opportunities and expansion of electronic activities on the internet. Thus electronic money offers increased safety and security by eliminating some opportunities for

theft. Electronic money potentially sharpens offers of value added services strengthening customer relationship. For medium value transactions, credit card and Debit card provide a sufficiently efficient means of electronic cash on the internet. In spite of the benefits of electronic payment system, the level of acceptance of this technology by consumers and merchants are very slow.

A dramatic revolution in payment methods has been made through the plastic card. The credit card is a payment vehicle of convenience which provides its holder with benefits. They includes safe and secure way of carrying monetary value, a means of making payment abroad and obtaining foreign exchange, consolidating payment of transactions, obtaining credit, spreading payments and in case of credit card securing the creditor indemnity for any misrepresentation. The payment revolution has been spread internationally with the establishment of cash dispensers and electronic terminals. The international inter-bank cash dispenser network, in addition to the credit cards issued by VISA, Master Card, and American Express are alike. Credit card are a subset of the general category of payment cards which enables the person to discharge his obligations to a supplier in respect of payments for acquisition of goods, service facilities, the supplier being reimbursed by a third party. The cardholder can also settle the indebttness without interest by paying the entire amount on receipt of the statement. The impact of technology on credit card operations is formidable.

### **1.2.1 ABOUT BANKING INDUSTRY IN INDIA:-**

Banking circles in India are today abuzz with the talk of marketing. Every bank, big or small, closely held, widely held or even government held is marketing its services to customers by evolving new financial instruments and adopting new strategies.

For the present discussion the evolutions of bank marketing in post independent, India can be broadly classified in three phases, namely pre nationalization period (preceding 1969), post nationalization period (after 1969 and up to eighties) and financial reforms and thereafter. Reflecting the marketing stance of Indian banks during three phases they have been named; traditional banking period, the development banking period and the bank marketing period respectively.

The main objectives of nationalization were reduction in regional imbalance of economic activity, to make the banking system reach out to the small man in rural and semi-urban areas, extending banking facilities so that they not only mop up potential saving but also meet the credit gaps in agriculture, small scale industries and other neglected sector of the economy. The aim was to bring large areas of economic activity within the organized banking system. The two significant aspects of nationalization were, therefore, rapid branch expansion and channeling credit according to priorities. In the wake of nationalization, the growth and development of Indian banking system was phenomenal. By the end of the second decade of nationalization, Indian banking was relatively sophisticated with a wide network of branches, huge deposit resources and extensive credit operations.

### **1.2.2 ABOUT BANK CREDIT CARDS, DEBIT CARDS AND ATM CARDS: -**

If you ask single Americans in their 20s or early 30s what their biggest financial worry is, most will probably answer credit card debt, say “Scott Bailer” in his book, “credit card & debt management.”. In today’s scenario, business areas are broad and several business decision & wants of human beings are very much on viability available of currency. The modes of modern generation currency are of various types’ like-by cheque, draft and other mode of banking payments system. Now a days we use plastic currency for making business transaction payments which is most economical & efficient for business and every one.

The relatively brief history of bankcards has been dramatic in terms of growth and change in the banking industry. Credit cards, ATM cards, Debit cards and other plastic cards were not in existent 50 years ago. These cards are also known as electronic money or cards and today they are used to perform more than hundreds of millions of financial transaction daily. The concept of the credit was first used in Assyria, Babylon and Egypt 3000 years ago. Plastic money came into being in 1950 when Diners club and American Express launched their charge card in USA. In 1951, Diners club issued the first credit card to 200 customers. With the magnetic strip used in credit cards coming in 1970, credit cards become most popular. Diners club of India was the first to introduce credit card in India by acquiring the franchise for India from diners club of USA. Around this time, Diners club card ceased to exist in India and was reborn as Citibank-diners cub card, marketing the entry of the multinational banks into India credit card business.

Among the various innovative lines of services offered by the commercial banks, the credit card is one of the major instruments of consumer transaction, which replaces a cheque in the payments of every day debt. Bank credit cards have also reshaped the credit market, offering consumers access to unsecured revolving credit. The rapid growth of the bank credit card business has been fuelled by cardholders, merchants and banks. Credit cards are popular with consumers because they make purchase of the products and services more conveniently and repayment can be made in each month or extended through monthly installments. Credit cards are also safer than cash.

When credit card programmes were first established, losses were common. Credit was expanded too rapidly and in many cases, approval criteria were inadequate. Most of these problems have been mitigated and credit cards are a profitable line of business for the banking industry today. Financial entities other than banks have entered the credit card business and either in direct competition with banks or in partnership arrangement, new offer so called co-branded credit cards. Partnership marketing is one of the fastest areas of growth in the bank credit card business.

Good service means responding quickly, accurately and courteously to consumers. When problems are not resolved in the card holder's favour, the reasons for the decision should be explained in sufficient detail to card holder. Commonsense and empathy should dictate responses to customers. Toll free customers service numbers and 24 hours availability is good example of the increased emphasis banks are placing on providing good services.

Credit cards are the plastic card that allows the cardholder to obtain money, goods or services under a line of credit established by the card issuer. Credit line is the established maximum dollar amount that may be permissibly borrowed on the credit card at any given time. It is initially set by the bank at the time of card approval. The amount of the credit line is set by the card issuer for the cardholder's account.

Debit cards are the plastic cards issued by a financial institution that charges the customer's personal account. The card may be proprietary or it can be regionally or nationally accepted card.

ATM is an unmanned electronic device that performs basic teller functions, such as accepting deposits, cash withdrawals, account transfer, loan payments, and account balance inquiries.

### **1.3 SIGNIFICANCE OF THE STUDY:-**

Consumer Behavior is the base for business expansion because of the stiff competition prevalent in the banking industry. With the advent of new banks in 1995 "the concept of consumer behavior" has become an important issue in banks. Either it is in the public sector, private sector, co-operative sector and NBFC. The survival of banking business is dependent on consumer behavior.

The significance of consumer behavior for capturing business in banks has focus point in all stages of marketing of banking services, as almost all banks offer more or less the same products with little changes in

nomenclature. In the present day situations, consumers are becoming more and more demanding, bankers have to evolve new approaches, new and innovative products to keep pace with growing expectations. With the opening up of the economy, consumer behavior has acquired new meaning and different dimensions as banks are discovering more and more innovative products to meet increasing competition among them.

Truly, the consumer is the king in the present day banking, since the banks are providing tailor made service to the changing needs of consumer to face the competition from the rival banks. Consumers are not ready to accept any delay in service today and are in need of information for instant decisions. Therefore, consumer behavior is more important in servicing.

The electronic money services have become very important in modern economic era. Without E-money life for urban consumer becomes miserable as it is economical in terms of both time and money. Usages of E-money are almost inevitable in urban areas. The usages of E-money facilities are increasing the efficiency of both different forms of services such as banking, telecommunication and other forms of commercial transactions. It is cost effective both for service providers and the consumers.

The modern age can be rightly described as the credit age, where all transaction is made through credit cards, debit cards and ATM cards. All purpose big or small of consumers is made in the developed as well as developing countries through the credit cards, debit cards and ATM cards. Hence the study of consumer behavior helps in widening the market and services of credit cards, debit cards and ATM cards to cards launcher institutions, and the main significance of the electronic money is economic

medium of exchange, elasticity of monetary system, capital formation, increase consumption, easy payments and helps the system of exchange and so on.

With increasing competition among the banks products and services, the need to gain competitive advantage has become exceedingly imperative for their survival. From the consumers' perspective, the recent developments like the services of E-banking and increased banking innovations have caused a great deal of indecisiveness in differentiating the banks from each other in terms of their quality of service.

The emerging scenario makes it necessary for the banks to identify consumer behavior of service quality, which strongly influences the consumers' behavioral intentions. This would facilitate the process of categorizing, determining and measuring, controlling and thereby improving the consumer behavior in the context of service quality of E-banking services.

#### **1.4 OBJECTIVES OF THE STUDY:-**

All human acts are based on some or the other objectives. So, it is quite natural for the research work to have objectives. Any research work, which does not have objectives, is meaningless. Before beginning any research work, it is important to finalize the objectives because it helps in deciding the necessary data. The objectives of any research work should be specified clearly, because it saves us from any research problem arising later and also saves our valuable money and time. The present study is mainly aimed at examining the impact of electronic money services on consumer behavior and role of these facilities in their financial problems



and satisfying their needs. Keeping this in view the study mainly focused on the following objectives:-

- 1- To analyze socioeconomic and psychological profile of different strata of consumers taken in current study.
- 2- To study the expectation level of electronic money users of the area taken in the study.
- 3- To analyze the impact of customers motivation and satisfaction on Electronic money vis-à-vis impact of electronic money on customers.
- 4- To know the positive and negative impacts of random technological changes on customers.
- 5- To compare the consumer awareness, confidentiality of account and financial transactions, and E-money users in Bundelkhand regions and KAVAL regions.

### **1.5 STATEMENT OF PROBLEM:-**

The millennium is witnessing dramatic changes in the market place, changes in the life style of the consumers and a radical revolution in information technology. The behavior of the new generation of consumers has seen drastic changes. He knows his rights. His expectations have increased; he has become more knowledgeable and is also aware of the multiple options satisfying his needs. He can switch over to new brands to get more value for his money. There are increasing numbers of competitors, both domestic and global, offering higher value for his money added products and process through innovation. The consumer has

more purchasing power and can access information i.e. E-commerce and E-business.

E-banking is worldwide phenomenon which has revolutionized and replaced the traditional banking. On the world banking map, E-banking is gaining prominence, globally, day by day due to its apparent advantages to consumers, business entities as well as the banking industry as a whole. Though E-banking is getting popular and spreading very fast in Indian economy but most of the people do not know about it and people who know about it are reluctant to use it due to some misconceptions like password hacking, privacy, security, etc.

Out of the various E-banking services provided by the banking industry, E-money is one of the important services. Today, electronic money has become a part and parcel of our society and users. Thus, it poses a major challenge in front of the Indian banking industry. The present study is an attempt to find out the behavior of consumers towards E-money services provided by the service providers.

### **1.6 HYPOTHESIS OF THE STUDY: -**

Hypothesis is usually considered as the principal instrument in research. Its main function is to suggest new experiments and observations. In fact, many experiments are carried out with the deliberate object of testing hypothesis. The hypothesis may not be proved absolutely, but in practice it is accepted if it has understood a critical testing. Before we explain how hypothesis are tested through different tests meant for the purpose, it will be appropriate to explain clearly the meaning of a hypothesis and the

related concepts for better understanding of the hypothesis testing techniques. The study is carried out mainly to prove/disprove the following hypothesis:-

- A. Majority of consumers are not using the services of Electronic Money due to lack of sufficient awareness and knowledge.
- B. There is no significant association between sex, age, education, occupation, income and E-money users.
- C. Fear of loosing confidentiality of their accounts and financial transaction stops consumer from using Electronic Money services.

### **1.7 PRESENT STATUS OF THE STUDY: -**

Consumers are using the internet and can improve the expectation of their business. They can generate and exploit business opportunities with greater efficiency and speed. They can 'generate business value'. It gives to consumer, the advantage of better quality products by using interconnected networks, greater consumer satisfaction and greater economy. It saves time and gives greater speed of transactions and delivery. These change not only the thinking of the consumer, but can bring vast changes in the consumer behavior.

After all, it has been earlier pointed out consumer behavior is the decision making process and physical activity engaged in, while evaluating, acquiring, using and disposing off goods and services. Information based transactions are, therefore, creating new business opportunities and new ways of doing business. The need for E-Business arose for better

computing, better interaction between sellers and buyers, and both inside and outside the business organization.

Economic prosperity has changed consumer demographics and technological factors have made consumers to demand for better quality and efficient services. The service industry is now becoming a major contributor to the economy in many countries which were earlier dependent on the manufacturing sector. Service industry, particularly the banking sector, is not left behind in the competition.

The banking industry has been highly commoditized. To be in the business, every bank has competitive differentiation and this can be realized to a great extent through customer service excellence. The aim of banking industry is to satisfy customers and deepen its relationship with them. This can be achieved through cross selling and up-selling opportunity. The availability of advanced technologies helps in boosting the cross-selling, increasing customer retention and differentiating the brands in the retail banking sector.

There is a stiff competition in the banking industry and the adage 'survival of the fittest' holds good in the current scenario. Banks are expanding their costumer base and are trying to develop their own long-term strategies to stay in the market. In many countries, consolidation has become a common feature as most of the small banks are unable to withstand the stiff competition within the industry. Today, customers ask for Smarter Banking. Banks are bound to make service as their key business strategy because in today's world customer is the king. Technology plays an

important role in the various strategies employed for customer acquisition and retention.

Electronic Banking is a web-based service, enables bank's customers access their accounts. It allows the customers to log on to the bank's website with the help of a bank-issued identification and a personal identification number. The banking system verifies the user and provides access to the required services. The concepts of e-banking and internet banking are used synonymously in the banking industry, though in reality banking activities carried out through the internet just constitute a part of the whole gamut of E-banking. E-money in E-banking has made the world a global village and removed the time and geographical barriers. Billions of dollars can move across countries by a click of a mouse and this creates tremendous impact on the economy.

In today's world, time is as precious as money. People work hard and have a busy schedule. Doing their banking work, therefore, should be easy and convenient and not add to their worries. The E-banking has realized this and has customized a wide range of value-added products and services to make its customer's money work at its best. These, coupled with the enhanced consumer behavior, can make their work more convenient.

### **1.8 SCOPE OF THE STUDY: -**

Nowadays, Consumer Behavior and Electronic Money plays an important role in economic growth and development. Since the consumers are directly related to banking services and due to the changing scenario, Globalization and Liberalization have forced the banks to think in terms of

technology benefits and quality service to customers as future is full of challenges and survival will be a difficult task. The entry of IT infrastructure in the corporate world of Banks has brought with it many innovations, in particular the internet.

The Indian banking industry is not lagging behind; it has started providing services electronically over the internet. These services rendered over electronic media include phone banking, ATM, Credit cards, Electronic Fund Transfer (EFT), Shared Payment Network System (SPNS), Electronic Clearing Service (ECS), D-Mat accounts, Electronic Data Interchange, E-Cheques, and Corporate Banking Terminal.

These services provided by using electronic technology and media are called information technology or electronic banking or e- banking. E-banking has given opportunity to banks to find solutions to management problems like saving time money and energy or customers by reducing /minimizing paper works, waiting in queues, lack of communication and lack of efficiency. E-banking has provided ease and flexibility in banking operations. The recommendations of Narashimham Committee (1998), for the free and liberal entry of foreign banks in India have improved the scope for e-banking. As many foreign and private sector banks like CITI Bank, ICICI and HDFC banks brought with them IT based products like ATM, credit cards, debit cards, On-line banking etc. This forced the public sector banks and other banks to think on the same lines as these services would help banks to retain their customers, target on banking products and services more effectively to customers.

Customers are also benefited as they are given more free time to indulge in e-commerce business. Therefore, after 1980 throughout the world, the majority of banking transactions have been done through nets or by using information technology. So the information technology solves many problems of the banking industry and is very useful to the customers too.

The application of information technology will help in increasing the operating efficiency of the banking system. Its application will result in saving the cost. The quality of the information can be improved. The branches can provide improved customer services. The scope of E-money services are cost minimized for customers, helps to maintain customer loyalty, individualized and customized services with the help of integrated customer data, and convenience to customers-like card free banking, cash free banking provides a domain of access to banking services.

### **1.9 LIMITATIONS OF THE STUDY: -**

Limitations and constraints are inevitable in every research work. As it is apparent from the above discussion, limited works are available on the subject of the research study. The study has been carried out to understand the behaviors of consumers towards electronic money by using the credit cards, debit cards, ATM cards, Telephone recharges, Television recharges, etc. The study has been conducted in only Bundelkhand Region and KAVAL Region of UP and this is entirely dependent on the sample. The relevant data and information for the study have been collected from the primary and secondary sources. Hence, the study carries all the limitations inherent in the primary and secondary data. I came across many problems in collecting the data. After data collection, compilation and arranging the

data in a user friendly way and punching in the spread sheet was really challenging and tedious. During the course of compilation some approximations and estimates were also made.

The study excluded consumers who are uneducated and also school level educated consumers, even though they form bulk of the consumer community. More over the size of the sample chosen from the study constitutes only a negligible number in the vast consumer population due to financial and time constraints. Students and housewives are not included in the income category.

Statistical tools used for the analysis have their own limitations. So, the findings of the present study should be rationally and carefully utilized keeping in view of such limitations. The findings in this study are based on author's own calculations. In spite of the above limitations, the study is exploratory in nature.

#### **1.10 TERMS AND CONCEPTS USED IN THE STUDY: -**

**Account Aggregation:** -It is service that gathers information from many websites, presents that information to customers in a consolidated format.

**ANOVA:** - Analysis of variance is a method of splitting the total variation in data into meaningful components that measure different sources of variations. The technique is used for testing the equality of more than two normal population means. The analysis of variance is abbreviated as ANOVA.



**Automated Teller Machine:** - Automated Teller Machine (ATM) is a device that allows customers who have an ATM card to perform routine banking transactions without interacting with the human teller.

**Chi Square test:** -The chi square test may be defined as the measure of actual difference between the expected and observed frequencies. The formula for computing chi square is given by

Chi-square= $\sum (f_o-f_e)^2/f_e$ ; Where  $f_o$ =observed frequency or actual frequency.

$F_e$ = Expected frequency or theoretical frequency.

**Consumer buying behavior:** - The actions individuals take in deciding which goods and services to purchase.

**Consumerism:** -A movement was originating in the early 1960s to protect consumers from bad products, poor service, and misrepresentation by business about their products and warranties.

**Core banking Solution:** -CBS allows a consumer to accomplish various banking operations electronically.

**Credit card:** -A card issued by a financial institution or company that, when used to make purchases or withdraw cash, debits a line of credit established for customer.

**Cross-selling:** - The practice of promoting financial services in addition to the one currently is being used by a customer.

**Customer profile:** - A description of the distinctive attitude and personal characteristics of the typical consumer who buys a product.

**Customer relations:** - The policies and practices for the handling of all customer contacts including one-on-one transaction with employees,

complaint resolution, and written communications in a professional manner that results in a favourable image of the organization.

**Debit Card:** - Debit card can be used like a credit card for purchasing products and also for drawing money from the ATMs. As soon as the debit card is swiped for purchasing, money is debited from the individual's account.

**Degrees of Freedom:** -the number of independent variables is generally called the degrees of freedom. Symbolically,

Degree of freedom =  $(c-1)(r-1)$ ;  $c$  = no. of columns,  $r$  = no. of rows.

**Electronic Authentication:** -Verifying the identities of the customers and authorized e-banking activities are the integral parts of activities e-banking financial services. Pass-word and personal identification numbers, digital certificates using Public Key Infrastructure (PKI) are some authentication methods.

**Electronic Fund Transfer:** -EFT system permits transfer of funds from any account at any branch of any member bank in any city to any other account at any branch of any member bank in any other city.

**Electronic money:** - The money which is available in electronic form.

**E-Payments:** - Payment is generally understood as a transfer of fund from the one person to other person. In e-payments, the funds are transferred through electronic mode.

**Exposure:** - The amount of loss that could be taken should a borrower default, excluding all unnamed amounts, such as finance charges, unpaid premiums, and dealer reserves. Exposure is essentially the net principal amount.

**Internet banking:** - Internet banking also known as e-banking allows the customers to access their bank's website.

**Intranet:** - An intranet taps internet technology to connect everyone in a company. It allows everyone within the company to have access to applications, information, data, and processes by storing all functions in a single "warehouse" and allowing everyone access using Web servers and browsers.

**KAVAl Region:** - KAVAl word is a combination of five district of U.P. i.e. Kanpur, Allahabad, Varanasi, Agra and Lucknow.

**Local area network (LAN):** - A group of linked personal computers that can communicate and share information with one another, allowing various units within an organization to access the same data-base. It consists of a large-capacity personal computer (a server) that serves information down to the work-stations.

**Marketing information system:** - The people, computers, and procedures in an organization that are responsible for the collection and analysis of market data and the subsequent distribution of this intelligence to marketing management for use in planning and decision making.

**Marketing intermediary:** - A third party, or middleman, that helps the seller promote and distribute the product to the consumer.

**Marketing objective:** -A broad statement giving direction to an organization's short-term product, pricing, promotion, and distribution decisions.

**Marketing research:** - The gathering and analysis of factual information about products, prices, promotion, distribution, and consumers for use in marketing management and decision making.

**Qualitative research:** -A research method in which information is collected by in depth, interactive interviewing of a small number of consumers. This method is effective for determining basic needs, desires, and reactions to new products concepts and for identifying issues to be measured with quantitative research.

**Quantitative research:** - A research method in which data are collected by presenting a sizable sample of consumers with carefully prepared questions, either verbally or in writing. The result is statistical data about consumer attitudes and buyer behavior.

**Regional banking:** -The establishment of a banking presence in nearby states either by merger, acquisition, or new charter. Regional banking occurs when reciprocal laws are passed allowing bank holding companies in one state to acquire or establish a bank in another.

**Sample:** -A small number of individuals scientifically selected from the general population, whose opinions, preferences, and characteristics are representative of the group as a whole.

**Secondary data:** - Data collected by a third party and made available for others to use.

**Service:** - An intangible activity or benefit performed by a business that satisfies a consumer need. In banking, this term is often used interchangeably with product.

**Spread:** -The difference between the incomes earned in using funds and the cost to the bank of those funds. The goal is to maximize that spread, also called the “net interest margin.”

**Survey research:** -A marketing research method in which data are collected by asking consumers a series of questions, either orally or in writing, about their attitudes and buying behavior.

**System selling:** - Selling products and the associated services that support them as a comprehensive response to multiple customer needs.

**Target Market:** - A pre-selected group of buyers for whom a product is created and to whom a marketing campaign is directed.

**Tele-banking:** -Customers can carry out their transactions through telephones. Customers can keep themselves updated, make utility bill payment, and avail other related information through customer service centers.

**Tele-marketing:** -Promoting and selling products by telephone.

**Web Linking:** - A large number of financial institutions maintain sites on World Wide Web.

**Z- test:** - It is used for testing the significance of the difference between two proportions. It ascertains that the proportions of some attribute in the two populations are equal. To test the hypothesis, two independent samples of sizes  $n_1$  and  $n_2$  are selected from the two populations. Let  $x_1$  and  $x_2$  denote the number of items possessing the attributes in the first and second sample respectively. Then the sample proportions of the attributes will be  $p_1=x_1/n_1$ ;  $p_2=x_2/n_2$ .

To test  $H_0:p_1=p_2$ , the test statistic is  $Z= (p_1 -p_2)/ \text{standard error of } (p_1 -p_2)$   
$$= (p_1 -p_2)/\sqrt{PQ (1/n_1+1/n_2)}$$

Where  $P= (n_1p_1+n_2p_2)/ (n_1+n_2)$ ;  $Q=1-P$ . Here,  $P$  is an estimator of  $p$ , the common population proportion. If calculated  $Z$  value is less than table  $Z$  value then selected the hypothesis otherwise rejected.

**REFERENCE**

1. American Banker Association, "An Introduction to Bank Cards" The Bank Credit Card Business, Mac Millan Publications, New Delhi, India, 1996 & 2001.
2. Blackwell R.D., Miniard P.W. and Engel James F., "Consumer Behavior" Vikas Publishing House Ltd, New Delhi, India, 2003.
3. Chinnadurai M. and Kalpana B., (May, 2006), "Promotional Strategies of Cellular Services: A Customer Perspective", Indian Journal of Marketing, New Delhi, India, volume 36 (5), pp 29-37.
4. Desai Raghunath, "E-Banking", Srishti Book Distributors, New Delhi, India, 2007.
5. Dudija V.D., "Retail Business" Common wealth Publications, New Delhi, India, 2006.
6. Deva Vasu, "E-Commerce-A Manager's Guide" Commonwealth Publishers, Delhi, India, 2003.
7. Deva Vasu, "E-Banking" Commonwealth Publishers, Delhi, India, 2003.
8. Deva Vasu, "E-Services" Commonwealth Publishers, Delhi, India, 2003.
9. Diwan J.N., "Marketing Management" Common wealth Publications, New Delhi, India, 1999.
10. Goel Ritendra, "E-Commerce" New Age publications New Delhi, India, 2007.
11. Hugar S.S. and Vaz Nancy H, (June 2008), "An Evaluation of Customer Orientation of Indian Public Sector Banks." Indian Journal of Marketing, New Delhi, India, volume 38(6), pp31-40.

12. Hellofs Linda and Jacobson Robert. (January 1999), "Market Share and Customer Perceptions of Quality." *Journal of Marketing*, New Delhi, India, volume 63(1) pp16-25.
13. Khan Matin, "Consumer Behavior" New Age publications New Delhi, India, 2004.
14. Kapoor D.C., "Marketing and Sales Management" S. Chand & Company Ltd, New Delhi, India, 2004.
15. Kotler Philip, "A Frame Work for Marketing Management" Pearson Education Private Limited, Delhi, India, 2003.
16. Kaptan S. S., "Credit Card in India" New concepts in banking, 2001.
17. Luck J. David and Rubin S Ronald, "Marketing Research" Prentice Hall of Indian New Delhi, India, 2003.
18. Naik C.N. & Reddy L.V., "Consumer Behavior" Discovery Publishing House, New Delhi, India, 1999.
19. Oberai Preeti, "Customer Relations" Sawrup & Sons Publications, New Delhi, India, 2002.
20. Oliver Richard L, (Special Issue 1999), "Whence Consumer Loyalty" *Journal of Marketing*, New Delhi, India, volume 63(Special Issue 1999) pp33-34.
21. Ramachandran Smitha, (July 2008), "An Overview of Customer Management in Retail Banking," *Professional Banker*; The ICFAI University Press, Hyderabad, India, volume 8(6), pp32-35.
22. Patnaik U.C. & Chhatoi Basudev, "Bank Marketing" Sonali Publications, New Delhi, India, 2006.
23. Pandey V.K., (June, 2004), "An Analytical Study of Consumer Behavior in the Financial Services Industry in Eastern UP in

- India.” Indian Journal of Marketing, New Delhi, India, volume 34(6) pp 26-30.
24. Pezzullo Mary Ann, “Marketing Financial Services” The Indian Institute of Bankers, Macmillan Publications, Delhi, India.
25. Raju M.S. & Xardel Dominique, “Consumer Behavior” Vikas Publishing House Ltd, New Delhi, India, 2008.
26. Saurabh Goyal and Thakur K.S., (July-December 2007), “Comparison of Customer Satisfaction in selected Public and Private Sector Banks.” Journal of IPM Meerut, India, volume 8(2), pp35-36.
27. Singh Yogesh kumar, “Fundamental of Research Methodology and Statistics” New Age International Publishers, New Delhi, India, 2006.
28. Sinha Arunabha, “Rural Consumer Behavior” Sonali Publications, New Delhi, India, 2005.
29. Sudhakar Francis and Nutan Lydia, (May, 2005), “An Objective Study of Customer Behavior in BPL Mobile Cellular Ltd.” Indian Journal of Marketing, New Delhi, India, volume 35(5) pp10-11&22.
30. Sadar S.B. and Fulzele T.U. (May, 2005), “Consumerism: Where does Consumer see himself?” Indian Journal of Marketing, New Delhi, India, volume 35(5) pp15-20.
31. Schiffman Leon G. & Kanuk Leslie Lazar, “Consumer Behavior” Pearson Education Private Limited, Delhi, India, 2004.
32. Srivastava Ashish Kumar and Sengupta A., (June 2004), “A Peep into the Mindset of the Consumer.” Indian Journal of Marketing, New Delhi, India, volume 34(6) pp 13-15.



33. Singh Rajmani and Yarso A.S., (May 2002), "Consumer Behavior and Consumption Pattern of Toilet Soap in Imphal City, Manipur." Indian Journal of Marketing, New Delhi, India, volume 32(6) pp18-22.
34. Swami Rama & Kumari Nama, "Marketing Management" Mac Million India Ltd, New Delhi, India, 1998.
35. Virani Varsha, (September 2008), "Customer Awareness and Perception towards Banking Channels of Kotak Mahindra Bank." Professional Banker, The ICFAI University press, Hyderabad, India, volume 8(9) pp66-70.
36. Vohra Munish, "Consumer Behavior" Anmol Publications Private Ltd, New Delhi, India, 2006.

# *Chapter 2*

## **Research Methodology & Review of Literature**

---

# **Research Methodology & Review of Literature**

## **2.1 Research Design: -**

The present study is descriptive type and the nature of study is qualitative as well as quantitative. The sample information's were collected from Bundelkhand region and KAVAL region of U.P.

### **A. Sample Design: -**

This study is based on the following procedures-

1. **Universe:** - All the literate population has considered as the consumer of Electronic Money users as universe in Bundelkhand region, and for comparison, the total literate population as consumers of KAVAL region have selected as universe.
2. **Selection of Sampling Unit:** -In this study, the sampling survey was conducted in the Bundelkhand region of Uttar Pradesh and KAVAL region of Uttar Pradesh for the purpose of comparison. There are seven districts viz. Jhansi, Banda, Jalaun, Hamirpur,

Lalitpur, Chitrakut and Mahoba, which comes under the Bundelkhand region and five districts i.e. Kanpur, Allahabad, Varanasi, Agra, and Lucknow, which comes under the KAVAL region. These are given in the following table-

**Table 2.1 Bundelkhand and KAVAL Region of Study**

S.N.	Bundelkhand Region	KAVAL Region
1	Jhansi	Kanpur
2	Banda	Allahabad
3	Jalaun	Varanasi
4	Hamirpur	Agra
5	Lalitpur	Lucknow
6	Chitrakut	---
7	Mahoba	---

3. **Sample Size:** - The overall sample size for the study is over 120 consumers in Bundelkhand region and 120 consumers in KAVAL region. In Bundelkhand region the sample size is 0.25% of the literate population while in KAVAL region 0.10% of the literate population.
4. **Sampling Procedure:** - Non probability sampling methods has been used in this study. Purposive sampling has been used to select the regions while Quota sampling has been used to select the size of sample in the specified regions to collect the primary data.

**B. Selection of Districts in Bundelkhand Region:** - As stated earlier there are seven districts in Bundelkhand region. Thus sample distribution in the Bundelkhand region has given in following table-

**Table 2.2 Sample Distribution in Bundelkhand Region**

Districts of Bundelkhand Region	Population	Rate of Literacy	Literate population	% of total literate population	Sample distribution
Jhansi	17,46,714	66.69%	11,64,883	23.46%	28
Banda	15,00,253	54.84%	8,22,738	16.57%	20
Jalaun	14,55,859	66.14%	9,62,905	19.40%	23
Hamirpur	10,42,374	58.84%	6,13,332	12.35%	15
Lalitpur	9,77,477	49.93%	4,88,054	9.83%	12
Chitrakut	8,00,592	66.06%	5,28,871	10.65%	12
Mahoba	7,08,831	54.23%	3,84,399	7.74%	10
Total	82,32,100	----	49,65,182	100%	120

*Sources: Chronicle India-2007.*

**C. Selection of Districts in KAVAL Region:** - Since there are five district in KAVAL region. Thus the distribution of the sample in KAVAL region is given in following table-

**Table 2.3 Sample Distribution in KAVAL Region**

Districts of KAVAL Region	Population	Rate of Literacy	Literate population	% of literate population	Sample distribution
Kanpur	41,37,489	77.63%	32,11,932	24.10%	29
Allahabad	49,41,510	62.89%	31,07,715	23.30%	28
Varanasi	31,47,927	67.09%	21,11,944	15.84%	19
Agra	36,11,301	64.97%	23,46,262	17.60%	21
Lucknow	36,81,416	69.39%	25,54,534	19.16%	23
Total	1,95,19,643	----	1,33,32,387	100%	120

*Sources: Chronicle India-2007.*

**D. Testing the Equality of Means between Bundelkhand Region and KAVAL Region: -**

To verify the mean of the samples which has taken from the two different regions, we apply the Analysis of Variance. First we set up the null hypothesis that there is no difference between the mean of samples in Bundelkhand region and KAVAL region against the hypothesis that at least two means are not equal.

**Table 2.4 Showing Calculations for ANOVA-**

Regions↓	Samples							Total $T_i$	Sample size $n_i$
Bundelk hand regions	28	20	23	15	12	12	10	$120=T_1$	$n_1=7$
KAVAL regions	29	28	19	21	23	--	--	$120=T_2$	$n_2=5$
Over all Totals								$T=240$	$N=12$

1-Correction Factor =  $T^2 / N = (240)^2 / 12 = 4800$ .

2-Sum of squares of all the twelve samples = 5282.

3-Sum of  $T_1^2/n_1 + T_2^2/n_2 = 4937.1$

4-Total sum of square (TSS) = step2- step1 =  $5282 - 4800 = 482$ .

5-Sum of square between the sample (BSS) = step3-step1 = 137.1

6-Sum of square within the sample (ESS) = TSS-BSS

$$= 482 - 137.1 = 344.9$$

7-The total degree of freedom =  $12 - 1 = 11$ .

The degree of freedom for BSS =  $2 - 1 = 1$ .

The degree of freedom For ESS =  $11 - 1 = 10$ .

**Table 2.5 ANOVA-Table (one-way)**

Source of variation	Sum of squares	D.F.	Mean sum of squares	Calculated F-Ratio	Tabulated F-value
Between samples	137.1	1	$137.1/1 = 137.1$	$137.1/34.49 = 3.97$	$F_{1,10}$ $(0.5) = 4.96$
Error	344.9	10	$344.9/10 = 34.49$	--	--
Total	482.0	11	--	--	--

Since calculated value of F is less than the tabulated value, so we accept the null hypothesis at 5% level of significance and conclude that the samples have come from populations of the two regions having the same mean.

**E. Selection of Banks in Bundelkhand Region:** - In order to know the consumer behavior from the service provider's point of view, two large public sector banks and two large private sector banks have been considered in the study. State bank of India (SBI) and Punjab National Bank (PNB) are taken into consideration as public sector banks while Industrial Credit and Investment Corporation of India (ICICI) and Housing Development Finance Corporation (HDFC) are taken into consideration as private sector banks in Bundelkhand region. These banks have been chosen because they have a good market share and adopted technology.

**F. Methods of Collecting the Data:** -

In the present study, the data is collected through the following -

(a) The primary data is collected through questionnaire and surveys methods. The questions are closed ended. The questions are formed in such a manner as to elicit three types of information.

1. Identity information needs of the consumer.
2. Consumers background information such as age, sex, education, income, occupation and media by which the collected data are classified and analyzed.



3. Questions on the motivational factors of consumer behaviors revealing attitudes and opinions of the consumers.

(b) The relevant information regarding secondary data on the study area are gathered from the authentic secondary sources including books, research papers, journals, project report, state and central government publication and internet etc.

#### **G. Elements of Analysis: -**

In this study the collected data has been analyzed with the help of simple statistical tools like percentages, Pie charts, bar diagrams, Chi-square test, and Z-test.

#### **H. Period of the Study: -**

The period of study of this research work is confined to 2 years from the year January 2007 to December 2008. The year 2009 was chosen as the concluding year of the study period owing to non-availability of latest relevant data afterwards.

### **REVIEW OF LITERATURE**

**2.2 Introduction:** -Human being is the most intelligent and powerful creation of nature. Man is only animal that can take advantage of knowledge which has been accumulated and preserved through centuries. Human knowledge passes through three phases i.e. preservation, transmission and advancement. This fact is of particular importance in research which operates as a continuous function of ever-closer

approximation to the truth. His consistent aspiration in search of knowledge makes possible progress in all areas of human endeavour. Acquiring knowledge is a continuous process and any gap in it could be filled by investigator research. Value addition to the existing level of knowledge could also be achieved through extension in research which has already undergone.

For any specific research project to occupy his place in the development of a discipline, the researcher must be thoroughly familiar with both previous theory and research. To assure this familiarity, every research project in the behavioral sciences, has as one of its early stage, a review of the theoretical and research literature.

Thus, Review of literature in any research work is essential to evolve an edifice of knowledge to ensure that his study would be an addition to this field. In this backdrop the following section aims at evaluation work done by other researcher on the subject.

### **2.2.1 Review of Literature on Consumer Behavior: -**

Arora and Gaur, (2006)<sup>1</sup>, in their study, came to conclusion that CRM is a business strategy to acquire and retain the most valuable customer relationship. The core concept behind marketing is the role of exchange. Exchange can take place between buyer and seller and is also not limited to money. It is just like as social interaction, which gives birth to the concept of relationship. Relationship between two parties continues as long as parties get benefits.

Banumathy and Kalaivani, (2006)<sup>2</sup>, in their study, came to conclusion that customer satisfaction is a scale to measure the creditability of the services provided by any organization. The survey gave an opportunity to get the feedback of the customers about the cell phone services offered by the service provider. The results of the surveys have created a good image for the services providers. Majority of the respondents have given a favourable opinion towards the services. The service provider need to bridge the gap between the services promised and the services offered. The over all customers attitude towards the services is that even though they are satisfied with the existing services, they expect more value added services from service providers.

Birch, (2002)<sup>3</sup>, examined that by shifting from traditional to digital economy, consumers are expecting a change in every aspect of life. Even businesses are not spaced out from this revolution. A company which used to buy raw material through various traditional channels is now directly transacting with the supplier by just a click of the mouse. Technology has changed the way of doing business and B2B marketplaces are playing an important role in this transformation. Executives are exploring the internet in different ways and putting their efforts to make internet an important medium of business.

Bagozzi R. P. and Dholkiya U., (1999)<sup>4</sup>, in their study, analyzed that goal plays an essential role in enriching the purposive behavior of consumers. They gave the out line of a conceptual framework for thinking about how goals emerge, influence decision making and guide consumer choice and action. Another purpose is to integrate classic ideas proposed by consumer

researchers with emerging concepts and models proposed by cognitive psychologists, social psychologists, and other social scientist.

Chinnadurai and Kalpana, (2006)<sup>5</sup>, in their study, came to conclusion that as customers vary in age, income, educational level, mobility patterns, taste, etc it is necessary for the marketing manager to understand the behavior of consumer groups and develop products that can cater to their needs. This will help managers to have an advantage over competitors and make prediction to suit their preferences. It is found that the advertisements play a dominant role not only in influencing the customers, but also remain as leading tool. The study also revealed that sales promotion offer introduced by cellular companies have influenced the customers to purchase and avail cellular services.

Dull, (2002)<sup>6</sup>, examined that customer satisfaction with e-commerce in both B2B and B2C sectors is significantly low. Most organizations have failed to build strong online services to the customers. The study identifies the various market segments in both B2B and B2C sectors and brings guidance for marketplaces to build strong e-brands and companies need to develop basic marketing skills to deliver what customers really want. Market research could be used to uncover customer needs.

Gole and Agashe, (2004)<sup>7</sup>, in their study, came to conclusion that for most people the word relationship conveys a feeling of faith, understanding, and acquaintance. When companies start customer relationship management, they attempt to gain loyalty by implementing business process with the focus on the enhancing of relationship with their customers. Digital CRM is revolutionizing the customers' centric marketing. E-CRM is very important today and it delivers profitable and sustainable revenue growth.

Garbarino and Johnson, (1999)<sup>8</sup>, in their study, came to conclusion that several theories of relationship marketing propose that customers vary in their relationships with a firm on a continuum from transactional to highly relational bonds. Few empirical studies have segmented the customer base of an organization into low and high relational groups to assess how evaluations vary for these groups. Using structural equation analysis, they analyze the relationships of satisfaction, trust, and commitment to component satisfaction attitudes and future intentions for the customers. For the low relational customers, overall satisfaction is the primary mediating construct between the component attitudes and future intentions. For the high relational customers, trust and commitment, rather than satisfaction, are the mediations between the component attitudes and future intentions.

Hugar and Vaz, (2008)<sup>9</sup>, in their study, concluded that customer orientation is the attitude of a concern towards its business and its emphasis on listening to customers with a view to maximize their satisfaction with the concern and its products. Such a concern aims at maximizing the long term satisfaction of customers even at the expense of losing immediate sale. With the opening of the financial sector, improved customer orientation will surely be an important factor in helping the Indian public sector banks to send to the global competition.

Hundal, (2008)<sup>10</sup>, examined that consumer is the pivot around which the entire business revolves and consumers differ in how they make purchase decisions, owing to variables type of family, income and occupation, status, etc. The consumers have a preference towards particular product

and are not ready to buy any other product available in the market. The preference will not change with the non-availability of the product which the consumer has decided to purchase.

Harnath and Subrahmanyam, (2005)<sup>11</sup>, analyzed that rising consumer affluence means consumers are willing to pay a little more for the convenience appearance, dependability, and prestige of better services. Consumer likes to purchase the better products and services. Amount of purchasing the products and services are also affected by consumers' family size while natures of services are not affected by consumer family size. Consumers are giving different preference to different purchasing pattern.

Hellofs and Jacobson, (1999)<sup>12</sup>, in his study, studied about the negative average effect of market share on quality and the relationship between customer satisfaction and market share. The potential role of different types of negative network externalities and loss of exclusivity in explaining market share's impact are also on perceived quality. Even when consumers claim they prefer to choose a product that is widely used, the perceived quality falls as market share rises. There are at least two possible explanations for this finding category. Consumer's expectations of what the performance should be increases. A second possible explanation is that consumers underestimate the negative externalities associated with gains in market share. When the change in share occurs and consumers experience the product, the decline in quality becomes apparent.

Lokhande, (2006)<sup>13</sup>, analyzed that Consumer awareness is essential to avoid any type of unfair practice or cheating by greedy marketers. Every

consumer has the right to get maximum satisfaction from the goods and services for which he has paid. Besides formal education, consumer education should be imparted right from High School level. A wider publicity should be given to consumer protection measures through T.V., newspapers. Use of audio-visual media is effective to educate illiterate consumers. Consumer protection movement should be strengthened.

Levy and Malaviya, (1999)<sup>14</sup>, came to conclusion that consumers are exposed to commercial messages and most messages share a common goal. The persuasion does not rest within an advertising message. They identified and elucidate the nature of many mental processes and organize our understanding of these processes by appropriately aligning them with the use of judgment formation strategies and a judgment correction process.

Lehmann, (1999)<sup>15</sup>, concluded that future of consumer research can be bright. If marketers think broadly, focus on interesting and relevant problems, and report results directly, the field will benefit. If not, it can become splintered and largely irrelevant. This leads to specific conclusions pertaining to theory and vocabulary. Theory explains the past and predicts future results. The study of consumer behavior is one of the most fascinating and multifaceted topics imaginable. The consumer research is needed to prevent consumer behavior from becoming increasingly isolated and of marginal relevance.

Mishra and Mahajan, (2008)<sup>16</sup>, in their study, came to conclusion that there is immense competition and changing consumer preferences in the present era which becomes eminent for the organizations to gain competitive advantage over the other firms. This can be achieved by

continuous innovation in the product by perfectly understanding the customer requirements which could lead to higher customer satisfaction. Changing consumer preferences becomes pertinent for the firms to know exactly what different customers want according to their needs and disposable income. Determining the potential for customer satisfaction or dissatisfaction in their study will give an insight to the firms in the business to identify the features which contributes to customer satisfaction and dissatisfaction.

Malyadri and Rao, (2008)<sup>17</sup>, in their study, came to conclusion that customer services would be deemed accomplished, when the levels of awareness of insurance are raised. Customer services in real sense would be deemed to have a be achieved , when the awareness of people is taken to further height from the other services like need based products, investment linked policies and the other flexible option. To create a satisfying services experience for both new and existing customer, companies must adopt a model that focuses on the customer products. This model helps to create the responsive sales and service environment and to attract and retain customers.

Mishra, (2007)<sup>18</sup>, examined that potential customer of the small car manufacture is highly price oriented. The deals offered by the company have increased the level of price sensitivity of the customer. This had made the customer promotion oriented and at occasions buyers of new cars of specific company tend to wait for a deal before making a purchase decision. In the small car industry price is a crucial factor which affects the sales volume. The sales promotional efforts should be adopt to meet the basic attribute of the customer.



Maruthamuthu et al, (2006)<sup>19</sup>, in their study, found that consumers are highly complex individuals, subject to a variety of psychological and sociological needs apart from their survival needs. They concluded that the introduction of a new variety of products may be attracting new consumers without damaging the existing potential. Family play the part of the major influencer in purchase decision of products. For attracting them the advertisement should be focused on the wants, needs and pleasure of family. Introduction of hygienic and attractive delivery channels without increasing the price may attract more consumers.

Madhavi and William, (2002)<sup>20</sup>, in their study, analyzed that there are different segments of customers with different perceptions of a products value and attempts must be made to identify the segments with different value perception, and which attributes have the biggest influence on such value perception. To attract customers, manufactures go for segmenting, targeting and positioning of their products based on value preference.

Mittal et al, (1999)<sup>21</sup>, in their study found that instead of offering products or services alone, firms and their partners are offering consumption systems. Consumption systems are characterized by a significant product and service sub system, as well as a pattern of consumption in which consumption occurs in multiple episodes over time. The cross over effect of products and services satisfaction in determining the intentions towards the manufacturer and the service providers is asymmetric over time. There is no direct link between satisfaction and behavioral intentions, while satisfaction affects behavioral intentions in the future through a dual-mediation route.

Nagraja, (2004)<sup>22</sup>, examined that rural consumer is totally a different consumer in the rural market scenario. They are influenced by rationally, personal experience, the level of utility that are derived from the consumption which are being influenced by the changing tastes and preferences of the younger generation. The clever and gimmicky advertisements do not work out with rural consumers. Their buying behavior is very much influenced by 'experience' of their own and neighbour consumers and his own family and involvement of his own members are exerting maximum influence on his purchases. Above all, quality of product and its easy availability are the primary and vital determinants of their buying behavior. They are very much attached to and influenced by 'touch and feel' aspect of any promotional activity.

Oliver, (1999)<sup>23</sup>, concluded that both practitioners and academics understand that consumer loyalty and satisfaction are linked inextricably. They also understand that this relation is asymmetric. Although loyal consumers are most typically satisfied and satisfaction does not universally translate into loyalty. The analysis concludes that satisfaction is a necessary step in loyalty formation but becomes less significant as loyalty begins to set through other mechanisms. These mechanisms omitted from consideration in current models, include the roles of personal determination and social bonding at the institutional and personal level. When the additional factors are brought into account, ultimate loyalty emerges as a combination of perceived product superiority, personal determinism, social bonding, and their synergistic effects.

Pandey, (2004)<sup>24</sup>, examined that consumer behavior matrix in the light of research data obtained from focus group discussions with a range of

financial products. Consumer's purchasing power is greatly influenced by the type of financial product being purchased. They can also postulate that one important unintended consequence of the introduction of new electronic based delivery channels may be to engender now at a distance exchanges which will impact considerably upon the process of service. Within the tradition structure and operation of the financial services industry, consumers had little choice in term of selecting financial instruments and delivery channels.

Rathnayake et al, (2008)<sup>25</sup>, defined complaining is one of the central behavioral concerns on which a retailer has to expand a considerable attention. Proper understanding of the dynamics of customer complaining behavior supports the retailer to treats the customers who are not satisfied with the retail experience. The youngsters view is that complaining as wastage of their time and effort. Moreover, they slightly believe that they have knowledge on the complaining process. Comparison to women, men tend more towards complaining to vaunt their anger. Mainly, it was recognized that the young customers are more inclined towards private actions and comparatively, men are more aggressive than women.

Ramchandran, (2008)<sup>26</sup>, came to conclusion that economic prosperity has changed consumer demographics and technological factors have made consumers demand with better quality and efficient services. Customers use the local branches of large commercial to avail themselves of the banking services. Traditionally, retail banks consisted of a number of branches which collected the deposits from public, facilitated repayment of deposits and other payment and offered loan. But technology enable bank to offer their facilities even through ATMs, phone banking and the

internet banking, which in turn have revolutionized the customer service. This has enabled them to minimize the need of physical branch networks. In this technological age, creation of a positive customer relation is not only a necessity but also a key strategy for differentiation. Banks are revisiting their operating models and strategies, both to create a dynamic customer experience and make profits.

Raju, (2008)<sup>27</sup>, came to conclusion that individuals act and react is based on their perceptions, not on the basis of reality. Thus individual perceptions are much more important to the market than knowledge of objective reality. As marketing concepts is built on the premises that marketing first identifies consumer needs and then develops products and services to satisfy the needs. The quality is found to be most important among all the other features.

Rao, (2008)<sup>28</sup>, analyzed that four critical elements differentiate a successful low cost air line from an unsuccessful one i.e. innovative customer experience, balanced growth, simplicity and efficiency from route structure and effective governance. These factors determine success and understanding their importance can yield rich rewards. While other factors afford more scope for variation customer experience is a key differentiating factor. Cost and price alone is does not drive the success of low cost carriers especially in an increasingly crowded and low yield market. An essential prerequisite is to develop a unique, well-crafted value proposition through a balanced mix of these factors with prime focus on customer that can make travelling a comfortable and memorable experience.

Rao, (2007)<sup>29</sup>, examined that banks competition and customer expectations would force the organization to evolve strategies for better management of technology. The organization culture is a vital factor that reflects on the human behavior, attitude towards customer etc. The human factors such as humility, tenderness, politeness etc., are various human behaviors on the part of banking personnel which can have salutary effect on the customer. Therefore, customer's delight is a must along with this technology mission. Men and machines are complementary but not competitive. They can work in tandem and create synergies conducive to strengthen brand equity and customer loyalty.

Singh, (2008)<sup>30</sup>, examined that (CRM) customer relationship management software acts as a catalyst to generate many customer. Due to the cut-throat competition, it has become essential for every business enterprise to adopt the CRM practices to gain long term customers support and loyalty. It is characterized by more integrated and forward looking approach and utilizes a common language in aligning. Strategic process and information technology of an enterprise are used for predicting customers need and behavior for strengthening relationship with them. Due to liberalization of the Indian banking sector, CRM plays a pivotal role in marketing banks goods and services.

Syedun, (2008)<sup>31</sup>, came to conclusion that customers are facing the problem of lack of spare points. At the same time, the customers are demanding more value, putting pressure on prices, wider variety, entertainment and social events irrespective of the income group. The success of business will depend on the choice of connect strategy and how they cater to individual customers need. Managers should concentrate on

consumer's perception, beliefs, needs and associations because their perceptions determine the actions of marketers which in turn influence them. Manager can attract consumers by a number of methods such as pricing, packaging, promotion and distribution. The understanding of consumer evaluations and associations for core products and new extension can avoid mistakes and reduce risk.

Suresh, (2008)<sup>32</sup>, examined that goal of customer retention management is important for any firm. A firm should manage retentions rate and choose retention strategies and tactics. Customer retention does not occur without incurring some costs. Companies can maximize customer equity by matching those costs to the retention values of individual customers rather than by acting on the myopic view that "retention is free." The foreigner insurance companies have been found making it possible and the public sector insurance organizations have been seen making efforts to conceptualize marketing.

Subramanian and Sathyanarayan, (2008)<sup>33</sup>, came to conclusion that success of any business lies in maintaining a strong base of loyal customers. The organization exists for the customers and the customers are the deciding forces behind success or failure of a business organization. Thus keeping the customers and ensuring customer satisfaction is very crucial for the success and growth of all service firms, no matter what is the size or nature of the business. They measured 9 items by keeping three variables such as operational competence, operational benevolence and problem solving orientation for both Front Line Employees (FLE) behaviors and Management Policies and Practices (MPP) trust worthiness. FLE analysis yielded two factors solutions by

combining operational benevolence with operational competence and problem solving orientations as distinct one for both ELE and MPP thrust worthiness.

Seth et al, (2008)<sup>34</sup>, in their study, concluded that development of a reliable and valid instrument is essential for assessing customer perceived service quality. On the basis of the findings revealed during the exploratory investigations, convenience and customer perceived network quality dimensions were added in the original scale. There were confirmed by a detailed analysis and validation procedures. Therefore the research can be seen as the study incorporating both functional as well as network quality attributes for assessing customer perceived service quality.

Sharma, (2007)<sup>35</sup>, examined that rapid deployment of new communications technologies in the customer service is the interaction between service personnel and technology and their influence on customer satisfaction. Specially, there is a lack of empirical evidence that indicates CSR (Customer Service Representative) characteristics, which are most beneficial in the spectrum of communication technology. Overall, the results suggest a high level of consistency for how CSR characteristics influence customer service satisfaction.

Saurabh and Thakur (2007)<sup>36</sup>, studied about customer satisfaction is the base for business expansion because of the stiff competition prevalent in the banking industry. Excelling and managing customer relationships are the future of the banking business or every body's business. Customer satisfaction is not to be viewed as just a business strategy but should become a corporate mission and goal. Unless this mission and goal percolates through out the organization at all levels, the chances are that

the attempts to address customers issues will receive only lip sympathy. Building value for customers should be seen as equal to building shareholder value. The challenge for public as well as private banks will be in the area of people (changing their beliefs and attitudes), technology and competition.

Skudience and Auruskeviciene, (2007)<sup>37</sup>, in their study, analyzed that consumers preferences belonging to specific environment. The majority of active people working in the dynamic environment where such personality traits as wisdom and competence, courage and imagination, independence, and success, reliability and harmony as well as charm and good looks are very important. Status in this environment is particularly important since it reflects their professional success. The strongest status is things they own, their looks and their relationship with important people. Clothes take a very significant place in their status creation.

Sehrawet, (2007)<sup>38</sup>, examined that marketers have been finding that it is hard to identify the new trust area for their marketing programs. Consumers in India nowadays are not forced to buy substandard product at higher price. Today customers are presented with world-class quality at reasonable price. This phenomenon has made the life of marketing people little tough and they have to be more accountable and responsible to consumers and the society.

Selvaraj, (2007)<sup>39</sup>, analyzed that the rural market is blooming, with increase in the disposable incomes of the households. By nature rural marketing is complex oriented and study of perception of rural consumers is always a difficult task unlike urban consumers. Rural consumers are not varying in their behavior, practices conviction and belief. The general



tendency has not changed widely between rural and urban consumers as regards to aiming on superior quality products. It is essential that an effective communication not only provides information about products but also educates them regarding the use of products.

Sudhakar and Nutan, (2005)<sup>40</sup>, in their study, came to conclusion that customer seeks more information about product before making purchase, so considerable amount of information should be given through advertisement. Any change in schemes should be communicated to the customer on regular bases. Create more awareness about revised schemes and incentives of post-paid among prepaid card users. Inform them through direct communication or by handing out leaflets when they came to recharge their prepaid cards. Display appealing poster in their view for graduating into post-paid sections. The services should be improved after sales. The CRM team in the company should be given adequate training regularly. There should be a provision for customers to register their complaints in complaints section which must promptly work out a solution for customer problems.

Sadar and Fulzele, (2005)<sup>41</sup>, in their study, analyzed that consumerism is a national problem afflicting every section of the society, men and women whether old, youth or child, rich or poor, rural or urban, literate or illiterate. Consumer protection is a form of social action which is designed to attain the well being of one group within a society namely the consumers. There were many misconceptions in the minds of common consumer regarding the practices in market. The least awareness was found in respect of unfair trade practices, malpractices and cheatings. As a good business practice a business must accept consumers are essential

constituents of business activities. In order to remain on the market place, business houses should accept consumers and consumer associations as equal partners in business and economic activities.

Selvaraj and Malathi, (2005)<sup>42</sup>, in their study, came to conclusion that consumer is the pivot around which the entire system of marketing revolves. Consumer behavior refers to the act of consuming goods or services. Majority of the consumers are motivated by their friends and relatives to buy the products. Majority of the consumers feel that the mobile service advertisement is satisfactory. It can be concluded that the existing customers are satisfied with the cellular service and is having good prospective customers for cellular services. By creating more awareness, better coverage, connectivity and new schemes the prospects for cellular service can be generated. The researchers concluded that “a bird without wings cannot fly likewise; a man without cell can not dwell in future.”

Sakkthivel and Mishra, (2005)<sup>43</sup>, examined that the modification of buying behavior and consumption pattern of rural consumers are long neglected and hidden in shells. This new avenue would positively to create more demand would bring more money to companies exchequers and also it introduce new products to rural consumers. Hence the company need to focus on the reasons behind the modification in consumers buying behavior and consumption pattern toward the products expected in medium or large containers.

Srivastava and Sengupta, (2004)<sup>44</sup>, came to conclusion that basis for purpose of the products is the requirement of consumers. They can not be provoked to buy the products. The habit and own choice of consumers

dominate their decision making. The role of advertisements is not important in this process. Role of advertising, and other promotional techniques should be adopted so that the consumer gives trial purchase to the product and on being satisfied develops a preference for it. The field of consumer behavior is complex, involving interplay of individual, social and socio-cultural processes.

Sampathkumar, (2003)<sup>45</sup>, examined that the study of consumer behavior is important to the marketer, students of marketing, policy makers, regulators and the consumers also. Majority of consumers now a day are highly concerned with the quality of the products. In a majority of cases, companies trying to attract consumers and their loyalty. The consumers both in urban and rural areas, desire to have quality products at reasonable prices and they trust more the advice of retailers. The marketers make efforts to supply quality goods at reasonable prices and also maintain good relations with their retailers.

Singh and Yarso, (2002)<sup>46</sup>, came to conclusion that everybody in this world is a consumer. Everyday of our life we are buying and consuming variety of goods and services. However, we all have different tastes, likes and dislikes and adopt different behavior patterns while making purchase decisions. With the changing technology, consumers taste and preferences are also characterized by fast changes. To meet this changing environment a firm has to be constantly innovating and understand the latest consumers needs and wants. Consumer behavior provides invaluable items and guidelines to marketers on new technological development which they explore.

Thrumoorthi and karthikeyan, (2006)<sup>47</sup>, in their study, concluded that in the present scenario a potential customer is offered a wide variety of products to choose in the market. The customer is king, it is he who determines the growth, prosperity and even existence of a business enterprises. The different factors that influence the customers were found to be brand name, availability, advertisement, different varieties, prices, quality, and type of package. From the result of these factors, the customer considered the specific brand to be the best as compare to other brands and the retailers are also satisfied with the services.

Virani, (2008)<sup>48</sup>, in her study, came to conclusion that kotak Mahindra is very much dedicated and sincere in the awareness and usage of banking channels by the customers. The assets of Kotak Mahindra bank are its intelligent workforce and the harmonious relation that exists between the lower and top management with sound financial strategies, effective marketing channels and excellent infrastructure, the bank has successfully achieved a good market share in India. She concluded that younger respondents have better understanding when compared to the older ones and the customers who are aware of the services are taking the benefits of its.

### **2.2.3 Review of Literature on Electronic Banking & its Services: -**

Anitha, (2008)<sup>1</sup>, examined that the information technology, in the country have enabled banks to provide transaction settlements through plastic cards such as credit cards, debit cards and ATM cards as well as smart cards to their customers. These plastic cards have given a new shape to money with instant liquidity, constant flow of funds and value added convenience. These cards have provided many benefits but the chances of incurring losses through frauds are also high. The credit card industry is serious in curtailing and minimizing the frauds associated with it. The credit card frauds can be minimized only if the merchants, card issuer and the cardholders take precautionary measures.

Ahmad, (2008)<sup>2</sup>, concluded in general, banking sectors reforms have produced favourable effects on the performance of commercial banks, witnessed by their achievement of minimum capital adequacy norms and increased non-interest income. The main challenge for the banks is to harmonize and coordinate with banks in other countries and to maintain financial stability. The other issues for the banks are poor performance of priority sector advances, persistence of still large NPAs, technology up gradation and decreasing interest income. The global environment is cautiously changing and creating new direction, dimensions and immense opportunities for the banking industry.

Arumugasamy and Shenbagavalli, (2008)<sup>3</sup>, examined that Automated Teller Machines has come in handy for the urban people to save time and energy for withdrawing money, instead of waiting for hours in queues. Now the boon is also available to villagers. They can have the advantage of ATMs. The bank of India started the first mobile rural ATM in south

India. This mobile ATM was inaugurated by our finance minister. "Around 40 percent our country's population has not still opened bank Accounts. This kind of initiative will surely motivate them to open Bank Accounts immediately" say Balchandran, chairman and managing Director, Bank of India. More than 8, 00,000 ATMs operate worldwide. There are around 18,000 ATMs in India as on March 31, 2005 but the bulk of them are located in major cities and towns. Bank authorities should come forward to install the ATMs in semi-urban and rural branches, so as to help the rural and semi-urban population in India.

Arora and Bansal, (2007)<sup>4</sup>, examined that HDFC bank is on number one position which made a timely disbursement of loan to its borrowers. The second number goes to Oriental bank of commerce (OBC) bank. SBI and PNB have equal positions and ICICI bank is on the last position. The employees of ICICI bank have excellent behavior, the employees of SBI have very good behavior, HDFC bank has employees with good behavior, and OBC has average behavior employees. The borrower of ICICI bank and HDFC bank were fully satisfied from the services of these banks. The consumer credit facility makes it easy for a person to have his/her own home, car and home appliances etc.

Akash, (2007)<sup>5</sup>, examined that banking industry face many problems like operating risk, legal risk, reputation risk, security risk, global player risk, business risk, high transparency risk, poor communication net work, high cost installation, under developed cyber law and illiteracy etc. In view of this banking industry not performing their functions up to mark, hence the banking industry should adopt suitable strategies towards improve the customers service.

Azhagaiah and Egilarasi, (2004)<sup>6</sup>, came to conclusion that India is considered as the fastest growing credit card market in Asia. There are distinct advantages of credit card system to the retailer and more especially to the small retailer. The credit card enables the banks to provide a full service to their customers and it is also useful marketing tool for maintaining good relation ship with the retailer and consumers. The development of India's spending pattern and payment card industry is at a critical stage, and initiatives are warranted to strengthen a responsible credit card culture among the customers.

Bhavani and Prakash, (2008)<sup>7</sup>, analyzed that on line banking is one of the emerging technologies, which is beneficial to financial institutions as well as their clients. It enables a person to carryout his transactions through the internet, irrespective of time and place. The comfort provided by this technology is that people need not to visit the banks personally. The internet not only provides the facility to shop and communicate online, but also bank online. Making deposits, withdrawals and paying bills are now just a click away. Digital signature is used in on line banking to sign and digitally encrypt all transactions. It simply enables one to avoid the time consuming paper based conventional banking process.

Dhade and Mittal, (2008)<sup>8</sup>, in their study, concluded that the phenomenal changes taking place in the banking industry indicate that the new private sector banks have gradually won the market with their customer-centric approach. The depleting market share of the public sector banks poses a threat to them. This study mainly focuses on the primary opinion of these banks. It is evident from the study of the customers of the private banks are more satisfied than those of SBI. Customers of the SBI are more

sensitive with regard to the processing time taken for account handling and technological updates. Dissatisfaction in those areas can lead to shifting to another bank, while in the case of private banks customers, proximity to residence and sometimes delay in the processing time can be the likely reasons to change the existing bank with a new one.

Gupta and Mittal, (2008)<sup>9</sup>, came to conclusion that banking business has already been different from other business because it comes under the services industry and financial services category. Every one making a financial transaction is anxious about the security of his money. Since innovative modes of transaction in banking like ATMs, internet banking mobile banking depends on the strength of the connectivity; this requires a lot of attention from the service providers, because a small interruption in the system may generate bad publicity and fear among the customers. Since mobile banking is any time and anywhere, banks need to ensure that their systems remain ready for the same. As customers are likely to find mobile banking more and more useful, their expectations would also increase.

Gupta, (2008)<sup>10</sup>, came to conclusion that in the early 1990s, the Narasimha Rao government embarked on a policy of liberalization and gave licenses to a small number of private banks, which came to be known as new generation banks. Since then innovations are taking place and e-banking is the most revolutionary innovation in banking industry. E-banking has made the world a global village and removed the time and geographical barriers. With the use of electronic network, billions of dollars can move across countries by click of a mouse and this creates tremendous impact on the economy. Though e-banking is an effective tool but many of the



customers are not using it due to non awareness of the facility. E-banking is not fully used due to inadequate awareness levels besides misconception about and lack of trust in the system. New technologies will not be successful until customers are satisfied with privacy and security aspects. It also requires some time to earn confidence among the customers even if it is easier and cheaper than the traditional methods.

Geetika et al (2008)<sup>11</sup>, discussed the concept of internet banking, perception of internet bank customers and issues of major concern in internet banking. Internet provides the banks with the distribution channel, which can be levered for increasing the scope of services as well as adding new customers. The customers look for ease in performing banking transactions along with more and updated information when adopting internet banking. Those banks whose policies and websites are complex will face a setback. Customers do not using all services equally. There is a greater concern for securities among the non users and the need to introduce such security measures which are valued more by customers, such as high security password on mobile, tips on website and automatic lockout on multiple incorrect password entry. There is need to increase the trust concern for security among nonusers by increasing the number of security features offered by the banks.

Ghosal, (2008)<sup>12</sup>, concluded that Reserve Bank of India has to ensure that banks price their products and services aligning with market environment. Consumers expect stability in banks to absorb market shocks. Majority of treasuries in the developing countries are building their own expertise in capital market products and providing sanguine advices to their own customer franchises. This is because both depositors and debtors prefer

stability in rates and expect banks to absorb market shocks. It is true that some changes are slowly creeping in and some conscious efforts by banks.

Ganesh et al, (2007)<sup>13</sup>, in their study, came to conclusion that in case of the customer trained by the system sellers (training service providers), the three factors extracted are, “providing motivation to participants through training service deliverer, service scope and other tangibles; providing customized knowledge inputs through training service deliverer and the other channels; and delivering effective training service process through service deliverer.” In case of the customers trained by the EDP/IT(Electronic Data Processing/Information Technology) department (in house trainers), the three factors extracted are providing customized knowledge enthusiastically through training service deliver; delivering requisite training service inputs through a service deliver; and providing quality interior service scope.”

Joshi, (2008)<sup>14</sup>, examined that retail banking is the need of the hour and has a bright future beyond any doubt. Globalization has shrinked the size of the world. Retail banking is basically a consumer-oriented business. One of its important components is that it helps in servicing a big number of small consumers. Many retail banks have highly customer focused strategies. Banks in all the segments are hurry to make more profit and overcome inherent risks. The growth of retail products offered by the Indian banks is increasing sharply. Retail banks encompass areas like horsing loan, auto loan, personal loan, education loan, consumer durable loan, and credit. Plastic money has played an important role in promoting retail banking.

Jokhi E and Jokhi M, (2008)<sup>5</sup>, in their study, examined that the bank customers are seen as potential targets for different types of fraudulent activities, both online and offline. Some of customers prefer to go to the banks personally to take care of our banking activities whereas some prefer to carry out the transactions through on line banking. Not only the people who use the internet for banking operation are victims of frauds but also who visit banks can also be trapped. Good banks never ask for personal information like password etc. online or offline. If any banking personnel ask for any such information do not disclose anything, but report the matter to the higher authority.

Kamakodi N and Basheer A, (2008)<sup>16</sup>, in their study, analyzed about the liberalization of Indian banking sector. All banks have either totally implemented 'core banking systems' or halfway through. The electronic banking channels indicate that banks were exceeding the expectations in technology based services and their perceived service level on branch network is below the expectation levels of the customers. Technology alone cannot give a sustainable competitive advantage for the banks. When all banks introduce IT, it will lose its position as a differentiator. Beyond a point, IT along with 'personal touch' will be necessary for the banks to retain existing clients and to attract new ones. Banks have to incorporate this in their operational strategy.

Krishnamurthy, (2008)<sup>17</sup>, in his study, analyzed that the latest innovation in the banking services is the introduction of 'e' mode of banking services i.e. e-banking or electronic banking. The kind of services offered by banks under the e-banking facilities has own advantages, disadvantages and risks. Most modern delivery channels, such as ATM, telephone, internet

and cluster banking are helping banks deliver products cost effectively. It is a well known fact that internet banking is fully technological and oriented towards the convenience of the banks clients. E-banking has made the domain of conventional banking products. The impact of E-banking can be described as a fulfillment of one of the socioeconomic objectives of the governments. Borderless nature of e-banking increases the potential for jurisdictional ambiguities with respect to the supervisory responsibilities of different national authorities.

Kumar et al, (2006)<sup>18</sup>, came to conclusion that e-CRM (Electronic Customer Relationship Management) in banks has enabled banks to global presence. They become customer-focused organizations by using the various electronic channels. These channels greatly help the banks in understanding the needs and wants of consumers and provide the various services. All this makes the customer loyal and happy. There are some drawbacks which are common to all e-CRM dependent businesses. There is no personal interaction between the customer and supplier. Business has become impersonalized with very powerful means of communication like body language judgment skills becoming non existent. Banks are not able to gauge their customers at all since the complete process has become over the computer screen.

Kumar Narender and Kumar Madan, (2005)<sup>19</sup>, concluded that computerization has brought improved customer services in bank branches. Both fully computerized and partially computerized bank branches have been benefit from the use of computers. But the increase in efficiency was higher in fully computerized bank branches as compared to PCBs. Some selected customer services viz. accounts opening, issuing of

drafts, etc. have gained more in terms of increase in efficiency. Other ones like collection of cheques and clearance of cheques have gained less in this regard. Another important is that customer education must to reap the real benefits of computerization. To educate the customers in rural areas, falling mainly in 'Service Personnel' and Agriculturist category, special banking weeks may be organized in village and towns informing present as well as potential customers about the new innovative customer services and educate them about how to use these services in a computerized banks branch. Similarly, special seminars and lectures may be organized to educate the customers falling mainly in 'Businessman /corporate' and professionals categories. To literate the bank customer about computerization in banks is not only essential for customer satisfaction but also it will lead to efficiency in banking operations.

Kumar Narender and Kumar Madan, (2005)<sup>20</sup>, concluded that customer is ultimately the key to profitability. The use of IT in Banks has contributed much in improving the customer services. The customer can now get the benefit of speedy and round-the-clock transaction processing and enjoy a high degree of satisfaction. The present study strongly recommends the adoption of information technology in banks so that the banks may equip themselves to satisfy the ever-increasing demands of their customers. Earlier, customers were chasing customers who are now more demanding and sensitive to service quality. Therefore, the computerization will lead to improved quality in customer services. It will equip the banks not only to retain their existing customers, but also to attract new ones.

Kumar Narender and Kumar Mohan, (2005)<sup>21</sup>, concluded that banking Industry not only kept pace with technological developments but also forced technology to keep pace with banking needs. Incidentally, banking

needs were ever increasing because of the force of competition among banks to provide better customer services and thus to retain existing customers and to attract new ones, whose demands expectations were ever increasing. Services and products like any where banking, tele banking, internet banking, web banking, e-banking, e-commerce etc., have become the buzz-words of the day and the banks are trying to cope with the competition by offering innovative and attractively packaged technology based services to the customers.

Malyadri and Rao, (2008)<sup>22</sup>, came to conclusion that taking fullest advantage of technology, quick payments and remittances will ensure optimal use of available funds for banks, Financial Institutions, Business houses and the common citizen of India. It will be an enabler for better cash and funds management. Timely receipt of payments by the parties, domestic or foreign, will reduce risks. Better funds management by industry and business will boost productivity and economic growth as well. E-banking has changed the entire profile of the banks in India. E-banking has come to help bankers in many ways. But people want better services. They want to do business transactions and banking, sitting right under the roofs of their houses and offices. The banks in India must wake up to reality and switchover to e-banking else they must face extinction. Providing a reliable legal frame work for electronic payments and dispute resolution process; consolidation of repayments systems; implementation of some of these recommendations to make it more convenient for users are some of the steps that can be taken to accelerate the usage of electronic payment systems in India.

Manoharan, (2008)<sup>23</sup>, came to conclusion that many banks have outsourced maintenance and cash replenishment services for ATMs. Though the outsourcing has been done to concern of repute, still the chances of banks suffering losses can not completely eliminated as human elements is involved and one can not predict what undergoes in ones mind. Banks have therefore to be vigilant at each and every stage. ATMs frauds not only cause financial losses, but may also hamper customer's confidence in using ATMs, which would run counter to the industry's efforts in encouraging greater use of the electronic channels of delivery. It is therefore in the interest of banks to prevent ATM frauds. ATM fraud is not the sole problem of the bank alone; it is a big threat, which requires a coordinated and co-operative action on the part of the bank, customers and the law enforcement machinery.

Manoharan (2007)<sup>24</sup>, examined that in India debit cards are more popular than the credit cards mainly due to the fact that Indians are not comfortable with debt. Moreover, only a savings account is needed to be eligible for the debit card. India is having huge customer's base who can afford a debit card but not a credit card. There is a tremendous scope for debit cards in the outlets and business, etc. Though debit cards are more popular now, still the ultimate winner in this bargain are the bankers, who are having both the cards in their product-line and gives the bankers a more competitive edge. This is the reason why Citibank, HDFC Bank, State Bank of India etc., are doing exceptionally well in plastic money business in India.

Manget, (2002)<sup>25</sup>, examined that growth of mobile business applications is expected to be much faster than mobile consumer applications. Several organizations are using mobile technologies to improve their supply chain

efficiency and offer more customer- oriented services. Organizations using mobile applications for sales force automation and customer relationship management have reported significant gains in their productivity. The study explained how emerging mobile applications would reshape the retail business model and significantly transform the traditional retailing industry. As consumer companies embrace wireless applications, three significant stages of development will occur. First, communication between organizations and their employees, customers, and suppliers will be radically enhanced, in effect mobilizing business operations. Second, companies will use new data from consumers and equipment to reshape business models. And third, previously untapped data will be processed in ways that will change the rules of competition and even redefine industries.

Malyadri, (2004)<sup>26</sup>, examined that several public sector banks have earmarked substantive budgets and are drawing up IT strategies to face the future challenges. The technology imperatives are of two sorts one for the internal management of banks and other for the interface with customer. Probably ATMs with graphical interface may be more uses friendly to rural folks than having to understand filling up of cheques. Indian banks have track records of meeting unprecedented challenges. Managing the change on account of technology will also be successes in prospect for banks. Planning for IT infrastructures in banking is gaining greater significance in view of the increasing the amount of investment and variety of technologies options to the users.

Nathni et al, (2007)<sup>27</sup>, concluded that a lot of common between magician and banker. Both are skilled practitioner of the art of making things disappear. The magician's audience is confused because of the



manipulation while banker's audience is confused because the trick is never explained. When bankers thought that the formula for success was simple that is to offer services. It is needed to offer quality services through CRM. The system should be transparent, where customer discuss and solve problems freely. There is urgent needed to aware the customer and banks about the relationship banking. So customer should be provided personal attention and banking services should be customized to his needs.

Narasaiah and Murthy, (2006)<sup>28</sup>, examined that technology today has become a strategic and integral part of banking, which provide products and services at competitive cost with better risk management practices. Additional customers have become very demanding and banks have to deliver customized products through multiple channels, allowing customers access to the bank continuously without any hindrances. There is a tremendous scope for Indian banks to enlarge their electronic banking services which in turn enhance their image. It is more essential to remove the hindrance of security, reluctance to change, lack of awareness among the customers. The changes in adoption of e-banking are also large in number.

Poon and Tan, (2008)<sup>29</sup>, in their study, came to conclusion that there are six factors influencing the growth of e-banking- convenience of usage cost of services, trust in bank, security concerns, awareness, reluctance of customers and government supports. All the factors are significant with respect to the consumers' willingness in using e-banking services. Internet accessibility, awareness, cost, trust in bank, security concerns, reluctance of customer, ease of use and convenience are the major factors affecting the adoption of electronic banking services. The advantages of e-banking

are modest when compared to other online channels. It is one of the fastest rising services and is a powerful tool for improving customer satisfaction as well as increasing cross-selling opportunities.

Pushpangathan, (2006)<sup>30</sup>, came to conclusion that Indian commercial banks are offering more varieties of products and services than those of foreign banks for meeting the needs of the different target groups. As regards facilities and amenities in public sector banks the customer expectations are not fulfilled when compared to foreign banks and private sector banks. Facility wise it is not near to foreign banks, the dissatisfaction of customers with the behaviors of bank staff in the dealing with customers in public sector banks and private banks. Though customer services committees are constituted in almost all branches of public sector banks, their performance are not up to mark when compared to private sector banks and foreign banks.

Prasad and Bhatnagar, (2005)<sup>31</sup>, concluded that it is necessary to develop suitable security application using technology innovatively to engender trust on-line because of the lack of face-to-face communication. People use a form of money that they trust. Establishing security is vital because it is the foundation of trust upon which other organizations and individuals will decide whether to use E-commerce for service delivery. Technology trends suggest that the relentless march of technology will lead to the introduction of smart cards that will ensure security, and will probably simplify life for the user. It could become a break-through development, considering that a critical mass of credit card users and ATMs are already in the market. Banks therefore need to keep themselves a breast with those developments in technology, such as security issues in network

communications, which may significantly influence their market share and profitability in the foreseeable future.

Pasa and Sherman, (2002)<sup>32</sup>, in their study, came to conclusion that several banks in Asia have started offering e-banking services. Most of them are offering basic services unlike those offered in developed countries. However, issues security and access to advanced e-banking products and services are the major deterring factors for the expansion of e-banking in Asia. The future of e-banking in Asia would depend on how banks measure to fulfil consumers' requirements.

Ravi, (2008)<sup>33</sup>, in his study, came to conclusion that cash Management services in banking industry enables commercial organization to work with more efficiently. It helps in transfer of payment of funds expeditiously. Normally, the service provider i.e. the bank, pools together all instruments pertaining to customer from different stations. Under normal circumstances, the funds are credited to the client's account within 24 hours. The CMS provides a centralized and comprehensive system of both collection and payment of funds which enables the corporate clients to plan their payment activities in a safe manner. The facilities provided under CMS differ from country to country depending upon the nature of collection and payment requirements of the clients. CMS enables the customers to receive funds with minimum transit time there by reducing interest costs.

Rayappan and Shunmughan, (2008)<sup>34</sup>, in their study, analyzed that banks have been designing products and selling them ever since they have been established. But there is a sea change in the current situation. There is a drastic change in customer preferences. However, the existing products

still do satisfy a segment of the market that has been accustomed to these products. They concluded that there is a significant relationship between the satisfaction of the customers and age, gender, marital status, educational qualification, occupation, annual income, account with other banks, and numbers of years of account operation, frequency of visit to the bank and total awareness of customers.

Ravi, (2008)<sup>35</sup>, in his study, analyzed that banking in India has witnessed remarkable changes and development since the liberalization, globalization and privatization. Due to increasing competition in retail banking, understanding the customer perception about service quality is becoming indispensable. The private sector banks are posing a very stiff competition to the public sector banks through their initiatives for meeting customer's expectations. This is reflected by the increasing market share and better profitability of private banks in comparison of the public sector banks. At the same time, public sector banks have also responded to the challenges posed by the private sector banks conscious efforts to enhance their service quality.

Radha, (2008)<sup>36</sup>, analyzed that Bank of America strongly believes in taking customer feedback to determine the parameters that need further improvement. He explained that successful Six Sigma project establishes a standard for evaluating new programs and technology investments. The major objectives of Six Sigma are to provide more sustainable measurable changes, Reduce down-time of the facilities like ATM machines, Reduce the processing cost and time, Reduce customer inquiries, complaints and cycle times, Improve ability to detect and prevent fraud at banking centers, Precise is to be control over payments to suppliers, Increase Customer

Delight with problem resolution, Increase productivity of new employees through training.

Reddy et al, (2007)<sup>37</sup>, came to conclusion that the banks must try increase productivity through better development of men, material and resources. In order to improve profitability it is advisable for every bank, to diversify its operations and concentrate on innovative products such as, merchant banking, leasing, factoring, insurance, credit cards etc. Further it is suggested that public sector banks should reduce the percentage of their Non Performing Assets to improve profitability. Assets liability management, risk management, man power planning, diversification, adoption of information technology are the key areas which should be concentrate to improve productivity and profitability in public sector banks.

Rathankar and Veeraiah, (2006)<sup>38</sup>, in their study, concluded that the evolution of IT services outsourcing in the Indian banks started from the basic level of Annual Maintenance Contracts (AMCs) around 10-12 years ago. It services in the banking segment has presently moved on to the level of Facilities Management (FM). Now banks are looking for Business Process Management (BPM) to increase the investment, improve Customer Relationship Management (CRM) and employee productivity. Internet banking is the latest in this series of technological wonders in the recent past year involving the use of internet for delivery the banking products and services. Internet banking is changing the banking industry and is having the major effects on banking relationships.

Reddy, (2004)<sup>39</sup>, examined that evolution of technology is taking place at an enormous pace and the approach to automation in banking must have an element of healthy “opportunism”. The Indian consumers at large is still not completely comfortable with technology of banking while middle classes becoming more familiar. The younger generations have started using computer from a very early age and this is the generation which would be the consumer of future. The safety and soundness of e-banking procedures are intended to compliment traditional procedures in evaluation of specific activities, such as lending, deposit-gathering and non deposit activities. Currently the e-banking in India is exposed to a lack of trust, hackers’ threat, and lack of communication, infrastructure and adequate security.

Reddy Raghunatha and Reddy Sudarsana, (2005)<sup>40</sup>, in their study, concluded that technology in the form of electronic banking has made possible to find alternate banking practices at lower costs. The recent emerging thrust in self-service channels, namely ATMs, call centers, internet and mobile banking could increase the use of e-banking as they offer the twin benefits i.e. convenience to the customers and reduction in operation costs for banks. E-banking can increase with the easy access of internet facilities among the masses, which would raise the comfort level for transaction via the web. The popularity of internet banking largely depends upon the installation of confidence in customers about the security and personal privacy of their money and assets.

Singh, (2008)<sup>41</sup>, examined that banking sector in the present scenario has emerged as the sun rise in Indian Economy. The CRM is one tool which helps in meeting the customer’s expectations according to the changing

needs. While analyzing the CRM implementation in both public and private sectors, it has been concluded that the private sector banks have been able to implement the CRM practices more effectively than public sector banks. This indicates that the private sector banks have been more innovative in understanding their customers and in understanding their customer retention. The banks are now under tremendous pressure to retain older customers because of the competition in the sector. This would not only ensure better customer relations but also loyalty among them, which is critical for their retention by the respective banks.

Sarangapani and Mamatha, (2008)<sup>42</sup>, in their study, analyzed that information technology has become an integral part of the banking system. With the help of IT, the banking industry is able to meet customer requirements efficiently. The major issues causing concern for extensive application of IT in banking relates to e-security threats in the form of cyber crime, frauds, thefts etc. In order to bring out meaning full discloser of true financial position of banks and to more closely to the international practices, banks are implementing processes which enhance transparency in the system. The existing legal frame work is adequate to meet the challenges of e-banking. Now it has become essential to create awareness among the customers, banks and society about the rights and remedies available against e-banking risks. The proper implementation of various provisions of cyber laws will ensure the safety of banking customers from various risks.

Singh, (2008)<sup>43</sup>, in his study, came to conclusion that in banking the quality of customer service holds primary significance, particularly in the context of sustained business growth. Unlike other industries engaged in

the production of tangible goods, banks are unique in the sense that they produce and deliver the service at the delivery points i.e. by the channels. This has an overwhelming impact on the customers psyche and makes them super sensitive towards the quality of service. The relationship between a bank and its customers is not a one time affair, but a relatively permanent and enduring one, which requires to be nurtured with good quality of service.

Subbakrishna, (2008)<sup>44</sup>, in his study, analyzed that a major transformation in payment systems across the globe happened since the last decade of the 20<sup>th</sup> century due to revolutionary possibilities offered by information and communication technology. Now all type of payments using the banking channel and inter bank settlement happens faster. Inter bank settlements are shifting to Real Time Gross Settlement (RTGS) system, from Deferred Net Settlement System (DNSS) basis, which are settled only at the end of the day. The shift to RTGS will provide safe, secure and cost effective payment system, besides reducing credit risk in the settlement process. The continuous encouragement to banks and customers is showing good progress in all the areas of Electronic Payment Settlement System. The migration from paper based system to mandatory electronic systems of large value payments of Rs1crore is an important milestone.

Srivastava, (2008)<sup>45</sup>, examined that Information Technology in banking has been an international phenomenon for two decades. Other salient developments include mobile banking and new service delivery channels in the form of multifunction kiosks, ATMs, etc., apart from a large-scale dependence on card-based retail transactions. In India, technology implementation poses innumerable issues and options, such as the choice



of optimal technology; cost of its implementation; high rate of technological obsolescence and need for periodical updating; advantages and risks of outsourcing; convergence of technologies as well as need for compatibility with the present systems so as to ensure smooth transition. These are indeed tough tasks but at the same it provides an opportunity to innovate and design customer-friendly products and services. Today, the deep penetration of mobile telephone across the social strata provides an opportunity to the central bank to explore the options of making it a reliable alternative for paper or card-based retail payment system in India.

Sharma and Nanda, (2006)<sup>46</sup>, in their study, concluded that the issuer bank takes a number of safeguards in the interest of cardholders so as to prevent the misuse of their credit cards by miscreants. It is for the cardholders to be extra cautions while moving out of their houses or transacting business at merchant establishments/ATMs through credit cards. Transacting business on internet makes the task easy, but who knows that the credit card related information has been stolen by the miscreants during the course of transaction and the card holder may turn out to be a victim subsequently. There does not seems to be a fool-proof solution to the problem and that is considered a sensible act is “Be careful, be alert” while holding credit cards.

Sharma and Nagpal, (2006)<sup>47</sup>, in their study, analyzed that Marketing Customer Information File (MCIF) can reduce the pain of the banks by providing readily available report for direct marketing and setting up a system of Customer Relation Management (CRM). MICF can be the most powerful management information tool. The arrival of MICF has been a boom for financial analyst, marketers, researchers, and planners; there has

not been a lot of emphasis on using this system to improve customer service and sales. It is a function, for which they are perfectly capable of and should be supporting. Customers are required to fill in a relationship form containing demographic and other information, which ultimately becomes the basis for CRM in new generation and foreign banks.

Sivaloganathan, (2004)<sup>48</sup>, examined that E- payment service is more of a cost saving function than revenue generating function. The banks will indirectly benefit from the service, which will have a positive impact on profitability. At present the market is growing at more than 150 percent every year and perhaps this growth prospect will lead all the major banks to enter into the bill payment market using the on line option. 13 banks including HSBC, standard chartered oriented bank of commerce and some cooperative banks have outsourced their e-payment service to bill junction payment limited, which provides end-to-end solution from registration to processing of payments.

Thiagarian, (2008)<sup>49</sup>, concluded that traditional banking has under gone a tremendous development in the recent years. Technological development in banking sector has changed the entire scenario of banking transaction. Due to the advent of technological development there was hardly any need for the customer to visit the branch as a result of introduction of ATM facility, phone banking, internet banking, mobile banking etc. and even for availing credit facility like vehicle lone, Housing loan, Personal loan, credit card etc, the borrower need not have to visit the branch. In the present day banking, many of the banking customers do not have contact with the branch in which they have opened the account. In the anywhere banking facility, the customer operates through the various branches of the

bank depends upon his necessity. The networking and anywhere banking facilities have extended the customer based of the branch beyond the service area.

Vinayagamoorthy, (2008)<sup>50</sup>, concluded that the current trends are quite comforting for customer but it does not pose threats and problems to banks. Banks are required to restructure, re-invent and reengineer themselves to meet the necessary performance improvement and get the competitive edge due to the introduction of information technology. Banks are slow but are going to offer in further more e-banking services to keep in pace with the evolving pattern of customers demand. Banks have to deal with the sophisticated clientele with the help of latest technology like e-banking. E-banking if taken in the right way by banks and customers would take the economy to its best and make it a boon to customers.

**Reference of Consumer Behavior:-**

1. Arora Devendra and Gaur Loveleen, (March 2006), "Data Mining An Emerging Technique for Customer Relationship Management (CRM)." Indian Journal of Marketing, New Delhi, India, volume 36(3), pp23-26.
2. Amna Kirmani, Sanjay Sood, and Sheri Bridges, (January, 1999), "The Ownership Effect in Consumer Responses to Brand Line Stretches." Journal of Marketing, New Delhi, India, volume 63, pp88-101.
3. Banumathy S. and Kalaivani S., (March, 2006), "Customer Attitude towards Cellular Services in Communication System." Indian Journal of Marketing, New Delhi, India, volume 36(3), pp31-34.
4. Birch Charles, (September, 2002), "Successful E-Business Strategy the Potential of Electronic marketplaces," E-Business, A Monthly E-Business Digest, Delhi, India, Volume 3(9), pp 68-74.
5. Bagozzi Richard P and Dholkiya utpal, (Special Issue, 1999), "Goal Setting and Goal Striving Consumer Behaviors." Journal of Marketing, New Delhi, India, volume 63pp 19-20.
6. Chinnadurai M. and Kalpana B., (May, 2006), "Promotional Strategies of Cellular Services: A Customer Perspective", Indian Journal of Marketing, New Delhi, India, volume36 (5), pp 29-37.
7. Dull Stephen F, (September 2002), "Building E-brands for B2B and B2C marketplace," E-Business, A Monthly E-Business Digest, Delhi, India, Volume 3(9), pp 28-32.

8. Gole S. V. and Agashe Abhijeet, (June 2004), "Customer Relationship Management –A Digital Perspective." Indian Journal of Marketing, New Delhi, India, volume 34(6) pp 35-38.
9. Garbarino Ellen and Johnson Mark S, (April 1999), "The Different Roles of satisfaction, Trust, and Commitment in Customer Relationships" Journal of Marketing, New Delhi, India, volume 63(4) pp70-72.
10. Hugar S.S. and Vaz Nancy H, (June 2008), "An Evaluation of Customer Orientation of Indian Public Sector Banks." Indian Journal of Marketing, New Delhi, India, volume 38(6), pp31-40.
11. Hundal B.S., (May, 2008), "Significant Considerations in the Purchase of Consumer Durables." The ICFAI Journal of Marketing Management, The ICFAI University Press, Hyderabad, India, volume 7(2) pp6-16.
12. Harnath G. and Subrahmanyam S.E.V., (May, 2005), "A Study of Preferences of Consumer Packs for Toffees/Candies", Indian Journal of Marketing, New Delhi, India, volume 35 (5), pp 3-7.
13. Hellofs Linda and Jacobson Robert. (January 1999), "Market Share and Customer Perceptions of Quality." Journal of Marketing, New Delhi, India, volume 63(1) pp16-25.
14. Lokhande M.A., (May, 2006), "Consumer Awareness-A Case Study of Jalna City", Indian Journal of Marketing, New Delhi, India, volume 36 (5), pp 23-28.
15. Levy Joan Meyers and Malaviya Prashant, (Special Issue 1999), "Consumer Processing of Persuasive Advertisements: An Integrative Framework of Persuasion Theories." Journal of Marketing, New Delhi, India, volume 63, pp45-60.

16. Lehmann Donald R. (Special Issue 1999), "Consumer Behavior and Y2K." *Journal of Marketing*, New Delhi, India, volume 63, pp14-18.
17. Mishra Hari Govind and Mahajan Chetna, (November, 2008), "Determination of Potential for Customer Satisfaction and Dissatisfaction in Mobile Handsets Using Kango Model", *Indian Journal of Marketing*, New Delhi, India, 38(11), pp 8-13&21.
18. Malyadri P and Rao K. Srinivasa, (July 2008), "Customer Service in Insurance Industry." *The Insurance Times*, New Delhi, India, volume 28(7) pp29-32.
19. Mishra Madhvendra, (October, 2007), "Customer Segment Research and its Role in Designing Sales Promotion Programmed for small Car Industry in India." *Indian Journal of Marketing*, New Delhi, India, volume 37(10), pp34-38.
20. Maruthamuthu K., Kumar Krishna K, and Vasan, (August, 2006), "Consumer Behavior and Brand Preference of Britannia Biscuits." *Indian Journal of Marketing*, New Delhi, India, volume 36(8), pp17-21.
21. Madhavi C. and Felix John Wiilliam, (July 2002), "Consumers Level of Perception and Experience of Product Values with Reference to Refrigerators." *Indian Journal of Marketing*, New Delhi, India, volume 32(7) pp6-8.
22. Mittal Vikas, Kumar Pankaj & Tsiros Michael, (April 1999), "Attributes Level Preference, Satisfaction, and Behavioral Intentions over Time: A Consumption System Approach." *Journal of Marketing*, New Delhi, India, volume 63(4) pp88-89.

23. Nagraja B, (November, 2004), "Consumer Behavior in Rural Areas: A micro level study of buying behavior of rural consumers in Kavali Mandal," Indian Journal of Marketing, New Delhi, India, volume 34(11), pp30-35.
24. Oliver Richard L, (Special Issue 1999), "Whence Consumer Loyalty" Journal of Marketing, New Delhi, India, volume 63(Special Issue 1999) pp33-34.
25. Pandey V.K., (June, 2004), "An Analytical Study of Consumer Behavior in the Financial Services Industry in Eastern UP in India." Indian Journal of Marketing, New Delhi, India, volume 34(6) pp 26-30.
26. Rathnayake C.V, Perera H.S.C., and Budddhika S.A., (August 2008), "Customer Complaining Behavior in Retailing" Indian Journal of Marketing, New Delhi, India, volume 38(8), pp 3-8.
27. Ramachandran Smitha, (July 2008), "An Overview of Customer Management in Retail Banking," Professional Banker; The ICFAI University Press, Hyderabad, India, volume 8(6), pp32-35.
28. Raju G Prageetha (May 2008), "Consumer Satisfaction towards Photocopies with Respect to Xerox in Hyderabad." Indian Journal of Marketing, New Delhi, India, volume 38(5) pp 29-32.
29. Rao venkoba, (January 2008), "Measuring Customer Satisfaction in Indian Low Cost Air Carriers" Indian Journal of Marketing, New Delhi, India, volume 38(1) pp8-10.
30. Rao Bhaskara V K, (October 2007), "Technology Management in Banks- A Paradigm Shift." Banking Finance, Kolkata, India, volume 20(10) pp7-9.

31. Singh Anchal, (September 2008), "Customer Relationship Management: A New Mantra for Banking Sector." Professional Banker, The ICFAI University press, Hyderabad, India, volume 8(9) pp 59-65.
32. Syeedun Nisa, (August 2008), "The Evolving food chains & Consumer's Buying Behavior." Indian Journal of Marketing, New Delhi, India, Volume 38(8), pp 22-27.
33. Suresh S., (June, 2008), "Customer Retention Marketing of Insurance Industry." The Insurance Times, New Delhi, India, volume 28(6) pp23-24.
34. Subramaniam N. Bala and Sathyanarayan K, (April 2008), "A Study on Consumer Trust, Value and Loyalty in Relational Exchanges." Indian Journal of Marketing, New Delhi, India, Volume 38(4), pp 38-43.
35. Seth Anita, Momaya K and Gupta H.M., (January-March, 2008), "Managing the Customer Perceived Service Quality for Cellular Mobile Telephoning: An Empirical Investigation." Vikalpa, India, volume 33(1), pp.19-33.
36. Sharma Anshuman, (January-December 2007), "Understanding Changes in Beliefs and Attitude towards Information Technology Usage for Customer's satisfaction." International Journal of Rural Development and Management Studies, Serial Publications New Delhi, India, volume 1(1-2) pp 19-20.
37. Saurabh Goyal and Thakur K.S., (July-December 2007), "Comparison of Customer Satisfaction in selected Public and Private Sector Banks." Journal of IPM Merrut, India, volume 8(2), pp35-36.



38. Skudience Vidya and Auruskeviciene Vitte, (January-June 2007), "Brand Personality and Consumers, A New Approach to Brand Management." Journal of Institute of Productivity and Management, Meerut, India, volume 9, pp 8-10.
39. Sehrawet Mahavir, (December 2007), "Impact of Packaging on Consumer Buying Behavior: A Comparative study of Rural and Urban Consumers in Haryana," Finance of India, Indian Institute of Finance, volume 21 (4) pp 1454-1459.
40. Selvaraj A., (December 2007), "Rural Consumers Behavior Regarding Non-Durable Goods: A Study in Erode District of Tamilnadu." Indian Journal of Marketing, New Delhi, India, volume 37 (12) pp35-42.
41. Sudhakar Francis and Nutan Lydia, (May, 2005), "An Objective Study of Customer Behavior in BPL Mobile Cellular Ltd." Indian Journal of Marketing, New Delhi, India, volume 35(5) pp10-11&22.
42. Sadar S.B. and Fulzele T.U. (May, 2005), "Consumerism: Where does Consumer see himself?" Indian Journal of Marketing, New Delhi, India, volume 35(5) pp15-20.
43. Selvaraj V.M. and Malathi Ganesan, (May, 2005), "A Study on Consumer Behavior towards Cell Phone Users in Thuthookudi City" Indian Journal of Marketing, New Delhi, India, volume 35(5) pp23-28.
44. Sakthivel A. M. and Mishra Bishupriya, (February 2005), "Effectiveness of Sachets in Modifying Rural Consumers Buying Behavior and their Consumption Pattern." Indian Journal of Marketing, New Delhi, India, volume 35(2), pp33-38.

45. Srivastava Ashish Kumar and Sengupta A., (June 2004), "A Peep into the Mindset of the Consumer." Indian Journal of Marketing, New Delhi, India, volume 34(6) pp 13-15.
46. Sampathkumar R, (December, 2003), "A Study of Consumer Behavior with Reference to Selected Products." Finance India, The quarterly Journal of Indian Institute of Finance, volume 17 (4) pp1478-1483.
47. Singh Rajmani and Yarso A.S., (May 2002), "Consumer Behavior and Consumption Pattern of Toilet Soap in Imphal City, Manipur." Indian Journal of Marketing, New Delhi, India, volume 32(6) pp18-22.
48. Thrumoorthi P. and Karthikeyan P, (September 2006), "A Study on Retailer and Customer Attitude towards P& G Detergent Powder in Coimbatore City." Indian Journal of Marketing, New Delhi, India, volume 36(9), pp26-31.
49. Virani Varsha, (September 2008), "Customer Awareness and Perception towards Banking Channels of Kotak Mahindra Bank." Professional Banker, The ICFAI University press, Hyderabad, India, volume 8(9) pp66-70.

**Reference of Electronic Banking & its Services:-**

1. Anitha S, (October, 2008), "Credit Cards Frauds and Precautions." Professional Banker, The ICFAI University Press, Hyderabad, India, volume 8(10) pp37-39.

2. Ahmad Irfan, (June 2008), "Banking Sector Reforms in India since Liberalization." Banking Finance Kolkata, India, volume 21(6) pp 13-20.
3. Arumugasamy S. and Shenbagavalli P., (May, 2008), "Growth and Development of ATM." Banking Finance, Kolkata, India, volume 21 (5) pp12-14&20.
4. Arora Usha and Bansal Monica, (July-December 2007), "Truth about Consumer Credit Schemes." Journal of IPM Meerut, India, volume 8(2), pp17-18.
5. Akash S. B, (June 2007), "Information Technology in Banks Industry under Global Regime." Banking Finance, Kolkata, India, volume 20(6) pp8-14.
6. Azhagaiah R. and Egilarasi L., (January, 2004), "Credits Cards and Spending Pattern." Banking Finance, Kolkata, India, volume 17(1) pp15-17.
7. Bhavani R and Prakash V, (October, 2008), "On Line Banking." Professional Banker, The ICFAI University Press, Hyderabad, India, volume 8(10) pp50-53.
8. Dhade Aruna and Mittal Manish, (May 2008), "Preference, Satisfaction Level and Chances of Shifting: A Study of the Customer of Public Sector and New Private Sector Banks." The ICFAI Journal of Bank Management, volume 7(2), pp62-68.
9. Gupta S.L. and Mittal Arun, (October, 2008), "Mobile Banking Present Status and Future Perspectives." Charted Financial Analyst: Indian Banking 2007-08, The ICFAI University Press, Hyderabad, India, volume 14 (10) pp98-100.

10. Gupta Sumeet, (July 2008), "A Study of Customers Perception towards E-Banking with Special Reference to Jaipur City." Professional Banker, The ICFAI University Press, Hyderabad, India, volume 8(6), pp 66-74.
11. Geetika, Tanuj Nandan and Ashwani Kumar Upadhyay, (May 2008), "Internet Banking in India." The ICFAI Journal of Bank Management, Hyderabad, India, volume 7(2), pp47-60.
12. Ghosal S N, (February 2008), "Pricing by Banks of their Products and Services." Professional Banker, The ICFAI University Press, Hyderabad, India, volume 8(2) pp. 41-44.
13. Ganesh S.K.G., Bhat M.S. and Kumar R.B., (October 2007), "System Training Services Provided by Training Service Providers and In-house Trainers-Organizational Consumers Perception About Service Attributes". Indian Journal of Marketing, New Delhi, India, volume 37(10), pp52-58.
14. Joshi Sanjay Kumar, (December 2008), "The Emergence of Retail Banking in India." Professional Banker, The ICFAI University Press, Hyderabad, India, volume 8(12) pp. 43-48.
15. Jokhi E Marzun and Jokhi M Delnaz, (October, 2008), "Dos and Donots For Protecting Your Banking." Professional Banker, The ICFAI University Press, Hyderabad, India, volume 8(10) pp41-43.
16. Kamakodi N and Basheer Ahmed Khan, (November, 2008), "Customer Expectations and Service Level in E-Banking Era". The ICFAI University Journal of Bank Management, Hyderabad, India, volume 7(4), pp 50-70.

17. Krishnamurthy Mallikarjunan, (June, 2008), "Product Innovation in Banking Industry." Professional Banker, The ICFAI University Press, Hyderabad, India, Volume 8(6), pp51-54.
18. Kumar Narendra, Anjana and Kavita, (June, 2006), "E-CRM in Banks." Banking Finance, Kolkata, India, volume 19(6) pp10-12&15.
19. Kumar Narender and Kumar Madan, (April 2005), "Bank Computerization and Customer Services-A Study." Banking Finance, Kolkata, India, volume 18(4), pp 22-23.
20. Kumar Narender and Kumar Madan, (March 2005), "Employees Response to Computerization in Banks." Banking Finance, Kolkata, India, volume 18(3) pp17-21.
21. Kumar Narender and Kumar Mohan, (February 2005), "Bank Computerization in India." Banking Finance, Kolkata, India, volume 18(2) pp12.
22. Malyadri P. and Rao K. Srinivasa, (February, 2008), "E-Payments: Some Emerging Issues." Banking Finance, Kolkata, India, volume 21 (2) pp20-23.
23. Manoharan B., (February, 2008), "ATM Fraud Protection Guidelines." Banking Finance, Kolkata, India, volume 21 (2) pp15-19.
24. Manoharan B. (May, 2007), "Role of Debit Cards and Credit Cards in Indian Banking Industry." Banking Finance, Kolkata, India, volume 20 (5) pp13-14.
25. Manget Joe, (September 2002), "Competitive Advantage from Mobile Applications", E-Business, A Monthly E-Business Digest, Volume 3(9), pp 22-25.

26. Malyadri P, (November, 2004), "Information Technology, Management in Banks." Banking finance, Kolkata, India, volume 17(11) pp18-22.
27. Nathni Navita, Agrawal K.K. and Holani Umesh, (February 2007), "Organizing Customer Relationship and Customer Perceivance." Banking Finance, Kolkata, India, volume 20(2) pp8-21.
28. Narasaiah P. and Murthy Sudarsana, (October, 2006), "E-Banking, Challenges Ahead." Banking Finance, Kolkata, India, volume 19(10) pp7-10.
29. Poon Wai-Ching and Tan Booi-Chen, (November 2008), "Spread of E-Banking in Malaysia: A Consumer Perspective". The ICAFI University Journal of Bank Management, Hyderabad, India, volume 7(4), pp71-85.
30. Pushpangathan.G, (March, 2006), "A Study on the Quality of Customer Service in Public Banks in Kerala." Finance India, The quarterly Journal of Indian Institute of Finance, volume 20 (1) pp209-211.
31. Prasad V Alakh and Bhatnagar S.D, (September 2005), "Security Issues in Electronic Commerce." Banking Finance, Kolkata, India, volume 18(9) pp24-30.
32. Pasa Mehmet and Sherman Mike, (September 2002), "Selling Internet Banking to Asians," E-Business, A Monthly E-Business Digest, Volume 3(9), pp 26-27.
33. Ravi D. Ramani, (December 2008), "Cash Management Services in Banking Industry." Professional Banker, The ICAFI University Press, Hyderabad, India, volume 8(12) pp. 57-61.

34. Rayappan E.K. and Shunmughan R., (June 2008), "Costumer Satisfaction in Canara Bank," Professional Banker, The ICFAI University Press, Hyderabad, India, volume 8(6), pp61-63.
35. Ravi R. A., (May 2008), "User Perception of Retail Banking Services: A Comparative Study of Public and Private Sector Banks." The ICFAI Journal of Bank Management, Hyderabad, India, volume 7(2), pp32-42.
36. Radha Krishna, (February 2008), "The Role of Six Sigma in Banking" Professional Banker, The ICFAI University Press, Hyderabad, India, volume 8(2) pp. 37-40.
37. Reddy S.V, Reddy T. Jayarami and Sakunthala B, (November 2007), "Profitability and Productivity in Indian Public Sector Banks." Banking Finance, Kolkata, India, volume 20(11) pp13-15.
38. Rathankar G. and Veeraiah P., (November, 2006), "Changing Scenario in Banking Sector in India." Banking Finance, Kolkata, India, volume 19 (11) pp13-18.
39. Reddy B. Ramchandra, (May, 2004), "Some Aspects of E-Banking." Banking Finance, Kolkata, India, volume 17(5) pp17-19.
40. Reddy Raghunatha S. and Reddy Sudarsana G., (January 2005), "Banking Services Through E-Banking." Banking Finance, Kolkata, India, volume 18(1) pp13-17.
41. Singh Anand, (December 2008), "Customer Relationship Management in Indian Banks." Professional Banker, The ICFAI University Press, Hyderabad, India, volume 8(12) pp. 66-70.
42. Sarangapani A and Mamatha T, (October, 2008), "IT Initiatives in E-Banking and its Security Aspects." Professional Banker, The ICFAI University Press, Hyderabad, India, volume 8(10) pp44-49.

43. Singh Sultan, (August, 2008), "A Study of the Quality of Services Provided to SSI (Small Scale Industries) Customers by Public Sector Banks." The ICFAI Journal of Management, The ICFAI University Press, Hyderabad, India, volume 7(3) pp71-72.
44. Subbakrishna K.R., (July 2008), "Large Value Payments through Electronic Payment Systems," Professional Banker, The ICFAI University Press, Hyderabad, India, volume 8(6), pp 59-62.
45. Srivastava Ashish, (February 2008), "Payment and Settlement Systems in India." Professional Banker, The ICFAI University Press, Hyderabad, India, volume 8(2) pp. 17-24.
46. Sharma A. K. and Nanda G. L., (July, 2006), "Frauds in Credits Cards Business." Banking Finance, Kolkata, India, volume 19(7) pp15-18.
47. Sharma Ashvine Kumar and Nagpal Shafali, (March 2006), "Marketing Customer Information File (MCIF): A Powerful Tool for Banks." Indian Journal of Marketing, New Delhi, India, volume 36(3), pp27-30.
48. Sivaloganathan K, (December 2004), "Payment via Electronic Media: A Competitive Advantage to Banking Industry." Banking Finance, Kolkata, India, volume 17(12) pp14-15&23.
49. Thiagarian T.S., (April 2008), "Training needs of the Banking Personnel" Banking Finance, Kolkata, India, volume 21(4) pp13-15.
50. Vinayagamoorthy A., (February, 2008), "Globalization and Recent Trends in Banking." Banking Finance, Kolkata, India, volume 21 (2) pp9-14.



## *Chapter 3*

# **Indian Consumers and its Behavior**

---

## **Indian Consumers and its Behavior**

**3.1 Introduction:** -The term Consumer Behavior refers to the behavior that consumers display in searching for purchasing, using, evaluating and disposing of products and services which they expect will satisfy their needs. The study of consumer behavior is the study of how individuals make decisions to spend their available resources on consumption related items. It includes the study of what they buy, why they buy, from where they buy, how often they buy, when they buy, and how often they use it.

How and why consumers make decisions to buy goods and services, consumer behavior research goes far beyond these facets of consumer behavior and considers the uses, consumers' make of the goods they buy and subsequent evaluations. In addition to studying consumers' uses and post purchases evaluations of the products they buy, consumer researchers also are interested in how individuals dispose of their once new purchases. It is important to society as a whole because solid waste disposal has become a major environmental problem that marketers must address in their development of new products and packaging.

**Personal Consumers versus Organizational Consumer:-**The term consumer is often used to describe two different kinds of consuming entities the personal consumer and the organizational consumer. The personal consumer buys goods and services for his or her own use, for the use of the household or as a gift for a friend. In each of these contexts, the

goods are bought for final use by individuals, who are referred to as “end users” or “ultimate consumers”.

The second category of consumer, organizational consumer, encompasses profit and non-profit business organizations, government agencies and institutions which buy products, equipments, and services in order to run their organizations. Manufacturing companies buy the raw materials and other components needed to manufacture and sell their own products; service companies buy the equipments necessary to render the services, government agencies buy the office products needed to operate their agencies.

**3.2 Reasons for studying Consumer Behavior:** - As a consumer, we will be benefited if we would have greater insight into consumer behavior. The field of consumer behavior holds great interest for us as consumers, as marketers, and as scholars of human behavior. The study of consumer behavior enables us to become a wiser consumer. As a marketer and future marketer, it is important for us to recognize why and how individuals make their consumption decisions so that we can have a better strategic marketing decisions. As a scholar of human behavior, we are concerned with understanding consumer behavior, with gaining insights into why individuals act in a certain consumption related ways and with learning what internal and external factors influences them to act as they do. Indeed, the desire for understanding consumption related human behavior has led to a diversity of theoretical approaches to its study.

Consumer behavior was a relatively new field of study in the mid to late 1960s. With no history or body of research of its own, the new discipline

borrowed heavily from concepts developed in other disciplines, such as psychology, sociology, social psychology ( the study of how an individual operates in a group), anthropology (the influence of society on the individual and economics). Many early theories concerning consumer behavior were based on economic theory on the notion of that individual act rationally to maximize his/her satisfaction through the consumption of goods and services.

The initial thrust on consumer behavior research was from a managerial perspective; marketing managers wanted to know the specific causes of consumers' behavior. They also wanted to know how people receive; store and use consumption related information, so that they could design marketing strategies to influence consumption decisions. They regarded the consumer behavior discipline as an applied marketing science; if they could predict consumer behavior, they could influence it. This approach has come to be known as positivism, and consumer researchers primarily concerned with predicting consumer behavior are known as 'positivists'.

**3.3 Development of Consumer Behavior**:-There are number of reasons why the study of consumer behavior developed as a separate discipline. Marketers had long noted that consumers did not always react as marketing theory would suggest. The size of market in this country is vast and constantly expanding. Billions of dollars were being spent on goods and services by millions of people. Consumer preferences were changing and becoming highly diversified. Even in industrial countries, where consumption of goods and services were always more than in newly industrialized or semi industrialized countries, buyers were exhibiting diversified preferences and less predictable purchase behavior.

As marketing researchers began to study the buying behavior of consumers, they soon realized that despite a sometimes, "me too" approach to fads and fashions, many consumers rebelled on using the identical products every one else used. Instead they preferred differentiated products that they left reflected their own special needs, personalities and lifestyles.

To better meet the needs of specific growth of consumers, most marketers adopted a policy of market segmentation, which called for the division of their total potential markets into smaller, homogeneous segments for which they could design specific products and promotional campaigns.

They also used promotional techniques to vary the image of their products so that they would be perceived as better fulfilling the specific needs of certain target segments-a process now known as 'positioning'. Other reasons for the developing interest in consumer behavior included the rate of new product development, growth of the consumer movement, public policy concerns, environmental concerns and the growth of both non-profit marketing and international marketing. Research into consumer behavior provided them with the necessary insights to develop new products and services and to design persuasive promotional strategies.

The growth of the consumer movement created an urgent need to understand how consumers make consumption decisions. Increased public concern regarding the environment made both marketers and public policy makers aware of the potentially negative impact of such products as aerosol sprays and plastic bottles. Consumer research revealed a large segment of socially concerned consumers who favour products that have

been modified to meet environmental concerns and many marketers have responded with what has come, to be known as 'green marketing'.

Organizations in the public and private non-profit sectors began to recognize the need to use marketing strategies to bring their services to attention of their relevant publics. To develop persuasive promotional programmes, they realized it was essential to understand their various publics.

Most large companies have long recognized the need to market globally to achieve major economies of scale. In an effort to correct the balance of trade deficit, the federal government encourages small and mid-sized companies to sell their products abroad. A major stumbling block too many international marketing efforts has been the general lack of familiarity with the needs, preferences and consumption habits of consumers in foreign markets. Marketers now use cross cultural consumer research studies as the basis for product development and promotional strategies to meet the needs of targeted foreign consumers.

The factors that influence consumer behavior can be classified into internal factors or (individual determinants) and external environmental factors. External factors do not affect the decision process directly, but percolate or filter through the individual determinants, to influence the decision process.

### **3.4 Individual Determinants:-**

**Motivation and Involvement:-**In a society, different consumers exhibit different consumer behavior because they are unique and have unique sets

of needs. Motivation is that internal force that activates some needs provides direction of behavior towards fulfillments of these needs. While talking of motivation, we cannot afford to the Maslow's Hierarchy of needs which tells us about the primary and secondary needs.

First the biological needs of hunger, thirst, shelter are satisfied then the safety needs then the psychological desires of being accepted in society, seeking status, esteem, etc. are satisfied. People adopt different methods to fulfill their needs. The need of transport can be met by car, rail, bus or aero plane. People choose different modes of transport because of their level of involvement in different activities.

Involvement refers to the personal relevance or importance of a product or a service that a consumer perceives in a given situation. Depending on the value and personal interest, a consumer can have a high or low involvement. For a professional tennis player, the choice of a tennis racket is made with great care. He sees the weight, size, grip and tension of the strings, etc. The racket is his most important professional tool. Similarly, a professional photographer has to buy a camera with the right specifications and attributes. For another person, a tennis racket may only be a means of entertainment or in the case of a camera, the recording of family and other events by a camera which is convenient and handy.

**Attitudes**:-These are our learned predispositions towards people, objects and events. Attitudes are responsible for our responses and are not inborn but are learnt from people around us. Our attitudes influence our purchase decisions and consumer behavior. A person having a carefree attitude will buy an object without much involvement. People, who want to safe and avoid risk taking, will go for a safe investment. People, who want

convenience and are short of domestic help, will have a positive attitude towards canned and frozen foods.

**Personality and Self Concept:**-It is the sum of mental, physical and moral qualities and characteristics that are present in us and that make us what we are. Consumers try to buy the products that match their personality. People wanting to look mainly will buy products with a macho appeal, which would enhance their image and personality. People, who give emphasis on comfort and care, will purchase comfort products and so on. If one wants to emulate a film star his choice will be different from others.

**Learning and Memory:**-Every day we are exposed to a wide range of information, but retain only a small portion of it. We tend to remember this information that we are interested in or, that is important to us. In a family, different members are interested in different types of information which they individually retain. Mothers retain information regarding household items. Father retains information regarding his interest in cars, motor cycles and other objects. Children are interested in objects of their interest like amusement parks, joy rides; Barbie dolls, etc.

Our motives, attitudes, personality filters the information. Keeping only relevant information in our minds and keeping the others out, this is known as selective retention. We retain in our memory only selective information that is of our interest.

**Information Processing:**-All consumers analyze and process the information they receive. These are activities that a consumer engages in, while gathering, assimilating and evaluating information. Consumers



assimilated and evaluate selective information and this reflects on their motives, attitudes, personality and self concept. Same information can be evaluated in a different manner by different individuals. The most common example is a glass half filled with a liquid. It can be interpreted as “half empty” or “half full”. The first is a pessimistic view and the other is an optimistic view of processing the information.

### **3.5 External Environmental Factors Affecting Consumer Behavior:-**

**Cultural Influence:** - It is defined as a complex sum of knowledge, belief, traditions, customs, art, moral law or any other habit acquired by people as member of a society. Different emphasis is given by different cultures for the buying, using, and disposing of products. People in South India have a certain style of consumption of food, clothing, savings, etc. This differs from the people in the North of India. Different cultures and habits are predominant in different parts of the world. Japanese have a different culture from USA, England or Arabian countries. Therefore, in consumer behavior culture plays a very important part.

**Sub-Cultural Influences:** - Within a culture, there are many groups or segments of people with distinct customs, traditions and behavior. In the Indian culture itself, we have many subcultures, the culture of the South, the North, the East and the West. Hindu culture, Muslim culture, and Hindu of the South differ in culture from the Hindus of the North and so on. Products are designed to suit a target group of customers which have similar cultural backgrounds and are homogeneous in many respects.

**Social Class:** - By social class we refer to the group of people who share equal position in a society. Social class is defined by parameters like

income, education and occupation etc. Within a social class, people share the same values and beliefs and tend to purchase similar kinds of products. Their choice of residence, type of holiday, entertainment, leisure all seem to be alike. The knowledge of social class and their consumer behavior is of great value to a marketer.

**Social Group Influences:** - A group is a collection of individuals who share some relationship, attitudes and have the same interest. Such groups are prevalent in societies. These groups could be primary where interaction takes place frequently and, consists of family groups. These have a lot of interaction amongst them and are well knit. Secondary groups are a collection of individuals where relationship is more formal and less personal in nature. These could be political groups, work group and study groups, service organizations like the Lions club, Rotary club etc. The behavior of a group is influenced by other member of the group. An individual can be a member of various groups and can have varied influences by different members of groups in his consumption behavior. An individual can be an executive in a company; can be a member of a political party. He may be a member of a service organization and of entertainment clubs and circles. These exert different influences on his consumption.

**Family Influence:** - As it has already been said, the family is the most important determinant of the primary group and is the strongest source of influence on consumer behavior. The family tradition and customs are learnt by children, and they imbibe many behavioral patterns from their family members, both consciously and unconsciously. These behavior patterns become a part of children's lives. In a joint family, many

decisions are jointly made which also leave an impression on the members of the family.

These days the structure of the family is changing and people are going in more for nuclear family which consists of parent, and dependent children. The other type of family is the joint family where mother, father, grandparents and relatives are also living together.

**Personal Influences:** - Each individual processes the information received in different ways and evaluates the products in his own personal way. This is irrespective of the influence of the family, social class, cultural heritage, etc. His own personality ultimately influences his decision. He can have his personal reasons for likes, dislikes, price, conveniences or status. Some individuals may lay greater emphasis on price, others on quality, still others on status, symbol, convenience of the product, etc. Personal influences go a long way in the purchase of a product.

**Other Influences:** - Consumers are also get influenced by national or regional events which could be like the Asian, the Olympics, and cricket test matches, World Cup, the war or a calamity. These leave permanent or temporary impressions on the mind of the consumer and affect his behavior. In these events, products are advertised and sometimes the use of a product like drugs, etc. is discouraged. People are urged to adopt family planning methods. Situation variables such as product display, price reduction, free gifts and attractive offers also influence consumer behavior.

External factors cannot affect the decision process directly but, these are also instrumental and exert an influence on consumer behavior.

### **3.6 Models of Consumer Behavior: -**

**Economic Model:** - In this model, consumers follow the principle of maximum utility based on the law of diminishing marginal utility. A consumer wants to spend the minimum amount for maximizing his gains. Economic man model is based on:

**Price effect:** Lesser the price of the product more will be the quantity purchased.

**Substitution effect:** Lesser the price of the substitute product, lesser will be the utility of the original product bought.

**Income effect:** When more income is earned, or more money is available, more will be the quantity purchased.

This model, according to behavioral scientists, is not complete as it assumes the homogeneity of the market, similarity of buyer behavior and concentrates only on the product or price. It ignores all the other aspects such as perception, motivation, learning, attitudes, personality and socio-cultural factors. It is important to have a multi-disciplinary approach, as human beings are complex entities and are influenced by external and internal factors. Thus, price is not the only factor influencing decision-making and the economic models according to scientists have shortcomings.

**Psychological Model:** - Psychologists have been investigating the causes which lead to purchases and decision-making. This has been answered by A. H. Maslow in his hierarchy of needs. The behavior of an individual at a particular time is determined by his strongest need at that time. This also

shows that needs have a priority. First they satisfy the basic needs and then go on for secondary needs.

The purchasing process and behavior is governed by motivational forces. Motivation stimulates people into action. Motivation starts with the need. It is a driving force and also a mental phenomenon. Need arises when one is deprived of something. A tension is created in the mind of the individual which leads him to a goal directed behavior which satisfies the need. Once a need is satisfied, a new need arises and the process is continuous.

**Pavlovian Learning Model:** - This model is named after the Russian Physiologist Ivan Pavlov. He experimented on a dog and observed how it responded on the call of a bell and presenting it with a piece of meat. The responses were measured by the amount of saliva secreted by the dog. Learning is defined as the changes in behavior which occur by practice and, based on previous experience. This is important to marketers as well. The learning process consists of the following factors:

**Drive:** - This is a strong internal stimuli which action. Because of the drive, a person is stimulated to action to fulfill his desires.

**Drives:** - Drives can be innate (inborn) which stem from physiological needs, such as hunger, thirst, pain, cold, sex, etc. and Learned drive, such as striving for status or social approval.

**Reinforcement:** - Thus when a person has a need to buy, say clothing, and passes by a showroom and is attracted by the display of clothing, their colour and style, which acts as a stimulus, and he makes a purchase. He uses it, and if he likes it, enforcement takes place and he is happy and

satisfied with the purchase. He recommends it to his friends as well, and visits the same shop again. Learning part thus is an important part of buyer behavior and the marketer tries to create a good image of the product in the mind of the consumer for repeat purchases through learning.

**Sociological Model:** - This is concerned with the society. A consumer is a part of the society and he may be a member of many groups in a society. His buying behavior is influenced by these groups. Primary groups of family friends and close associates exert a lot of influence on his buying. A consumer may be a member of a political party where his dress norms are different. As a member of an elite organization, his dress requirements may be different, thus he has to buy things that conform to his lifestyles in different groups.

### **3.7 Purchase Behavior (Situational Factors): -**

Purchase is very important as it generates revenue, and dislikes of the consumer. Post purchase behavior also establishes a link between the marketers as the product was planned, produced, priced, promoted and distributed after a lot of effort. If purchase does not take place, the marketer has failed in his marketing effort. He then needs to change the marketing mix. He has to change the entire strategy, as the ultimate aim of the marketer is to float a product which will generate revenue and bring satisfaction to the customer. Purchase is important to the marketer for his success, for achieving his objectives, and for formulating competitive strategies against the competitors. Similarly, the customer pays money and expects certain benefits and satisfaction from the product. It marks the end of his search, end of his efforts and chooses the brand of his choice for expected benefits.

For purchasing, the customer has to consider the (a) selection of outlets, i. e. where to buy from. A product may be available in a number of stores of different types and different sizes. Where to buy from is an important decision that has to be taken by the customer. He further has to think about the quantity of product that he has to buy. Should he buy in small quantities or in bulk? Should he take advantage of the discount facilities which are offered only for a short period of time, or should he ignore them, and buy his usual requirement for a month or for a week? This also depends on the amount of discretionary income that is available to him. There is another choice with the customer, (b) how he should make the payment. Should he buy in cash or in credit, or hire-purchase or any alternative offered by the dealer?

While taking a decision on these issues, a number of factors are to be considered, and these factors influence the decision-making process or the purchase process. The two sets of factors necessary for purchase are the buying intentions and the situational factors. Both these factors exert a joint influence on the purchase process. One without the other may not be sufficient to affect a purchase. The buying intention is a must for the purchase to come through. No matter how congenial the situational factors, the purchase may not take place without the customer having intentions to buy. He has to be motivated to buy product by exposing him to the product and instilling into his mind that the product is needed by him and will satisfy his long felt need.

Situational factors can be very many in number, but for all purpose, five basic situational factors are considered. These are:

1. Physical surroundings.
2. Social surroundings.
3. Task definitions
4. Temporal decisions
5. Antecedent conditions.

**Physical surroundings:** - As soon as a consumer enters a shop with intention of purchase, the most important things that he observes is the décor, style, cleanliness, etc. of the shop.

These physical aspects are eye catching and the most visible part of the purchase situation. The surroundings act as a stimulus for the consumer, and influence him through his five senses of sight, hearing, smell, touch and taste. The presence of these elements is not enough. They have to be present in the right mix to create an atmosphere which is congenial to all consumers. This is the concept of atmospherics, where not only the physical surroundings but, the music and the handling of the crowd in the store also emphasized. Since the consumer is exposed to a proper blend of these stimuli, he responds in a particular manner. He sometimes responds emotionally, and shows his pleasure or displeasure and may go in for a purchase. These physical surrounds also control the time he spends in the store. How he responds to purchase. The customer also tries to affiliate with other customers and also with the people in the store.

**Social surroundings:** - Purchase is affected by the presence of other members of the society and their opinion about the purchase and use of products. A consumer is a human being. He lives in society, and is



affected by the opinion of society member. If a customer is ambitious to spend time with high society member, his purchases is influenced, and he goes in to buy premium and branded items. Shopping is a social experience, and consumers are influenced by society members and sometimes blindly purchase things approved by trusted members of the society. When a consumer is shopping with friends, he tends to visit many more stores and makes many unplanned purchases. This is because he thinks that his wise companions are giving him sound advice which he getting for free, and that the opinion of a handful is better than his own judgment. While with friends, he likes to spend more time with them, and feels more confident of going from store to store and visiting the shops with new displays, new products, new variety and new items.

Salesmen have also observed that it is easier to sell to individuals rather than customers in groups. Unaided buyers can be convinced much easily than those with friends. Individual buyers sometimes give into the persistence of the salesman. It has also been observed that buyers who are with friends, comply with the request of the group of friends, even though they know that the product is not to their liking or, that would rather buy some other brand.

**Task definition:** - By task definition is meant, the buying intention or motive. Why is the purchase being made? Is it for self consumption or is it for a gift, or is it for a special occasion like a marriage gift and so on. Purchase task is decided by the various factors and what will be the reaction of the person to whom the gift is being given.

Buying flowers or a piece of jewellery on wedding anniversary, this situation also defines the task. Titan watches are advertised for giving as a present. A bigger present as a Godrej Store well may be given for a marriage to a friend. Sweets or chocolates are to be given to children visiting your house. Marketers use these techniques of selling products, and use the occasion based marketing opportunities to push their products. The task or the purpose and intentions must be known to the marketer to make his job easy.

**Temporal factors:** - By temporal factors we are referring to time. It may be the allotted for shopping. It may be the time of the day, shopping in the morning, evening or afternoon, time of the season, time of the year, time of festival, etc. Some ladies shop in the afternoon as they can be given more attention by the sales person. They can see a variety of products. The time which the sales man has is also ample, and he can pay more attention to customer's needs. Some buy or do shopping during festival seasons only, and their main shopping takes place during the festivals or when there is a function in their families. Some are regular buyers and are in the habit of buying regularly. These are the people with high discretionary income.

The time of buying also varies from product to product. An item of high value will require much more time than buying cosmetics. A high value item may take several days. A much higher value item like a flat or a house may take days and months together.

It also depends on the availability of time with the consumer. A busy executive may have very little time compared to a house-wife. The time available with them is different; hence the degree of involvement, the

information search also varies from product to product, from situation to situation. If a buyer is buying regularly, he spends lesser time in purchasing, than a buyer who buys at greater intervals of time.

**Antecedent conditions:** - There are other factors that also play an important part on purchases. These are the availability of resources (money) for buying the product of your choice. Other factors like the mood, the attitude, or the bent of mind for purchasing a product. If the purchases are made for a future period of time, they can wait or can be made at any convenient time. If the purchases are urgent, and you have used up your product and need to replenish the same soon, then the purchases are finalized quicker. The availability of the product is another factor for purchase. If one visits a few stores and does not find the product or the brand of his choice, he may develop a negative attitude towards the store or even towards the products.

When the buyer is in the mood he is more likely to purchase goods than otherwise. Therefore, marketers try to create a positive mood, by advertising appeals to get a positive response from the buyer.

A proper marketing strategy is to design to get a positive response from the customers. All the five situational factors described above should be kept in mind and a process be followed. This can be done by identifying the situational factors and research techniques. The market has to be segmented in proper manner, and the product positioned according to the need of the target segment.

**Non-Store Buying:** - This type of marketing is gaining importance in advanced countries where a shopper does not want to go to a store, and

avoids the difficulty of finding parking space. Wants to avoid long queues for payment or payment or does not have the time to drive down to a store several miles away. Has a higher discretionary income, pays greater importance to consumer life style. Non-store buying or direct marketing is one in which products and services are offered to a prospective customer by telephone, mail or other accesses.

In the purchase process, non-store buying also plays an important part. The non-store buying is prevalent where there is general economic development, availability technology where the marketer should desire to reach untapped markets.

Many companies have a list of prospective buyers, and send them catalogues, brochures, discount offers almost every week. They get a lot of business and give various facilities, and offer products at competitive rates. This also increases the knowledge of the consumer, and he also feels important and regularly places orders with these companies. There are many routes to non-store buying and the buyer can buy in a number of ways. Known buyer is one who places the order from the home by telephone, catalogue, brochure or mail. The consumer can avoid an extra trip to the market. This type of order on telephone is becoming very popular for items like rations for the whole month. A consumer gives the order over the telephone to his supplier, who notes down the order, and supplies it by reaching the goods to the desired destination.

**Tale marketing:** - This is similar to the above, and prepaid telephones are provided or toll free telephones are provided, so that the orders can be placed without any charge to the customer. This is used mainly by ladies, and is of western origin.

**Video-tax or interaction video:** - In this the buyer seller interaction can occur through TV sets and computer terminals. He can type his requirements on the computer, and through video-tax facility can interact, even see a portion of the store where his product is kept and all the variety of products that are available in that category. These methods are gradually gaining importance and with the increase in population, and congestion of the cities these methods are becoming popular in advanced countries.

We have therefore seen that the purchase is an important part of the consumer behavior, and purchases are the backbone of marketing activities. If the purchases are good, and the goods are moving fast, a company can rest assured of revenue, otherwise the marketer has to keep thinking of ways and means to find out the reasons for the shortfall in purchases.

**Significance of Non Store Buying:** - The non store buying is becoming popular because working women and others have less time to shopping. They can see more items on T.V. than a single store can display. By this method speciality products are easy to get. Non store innovations are becoming popular e.g. Mail order catalogues, pay by phone etc.

Some customers prefer the older methods of store buying and oppose the new techniques because they like to see the products and feel them. They like to go out to shop and get tempted to buy the products they do not need. They feel that being hooked on a computer may invade their privacy. However more innovations are expected in the future and that the customers will get the feeling of shopping in store by just sitting at home and can do everything sitting at home that they can do in a shop.

### **3.8 Post Purchase Behavior: -**

It is important for the marketer to know whether his product is liked by the consumer or not. He wants the feedback about his product so that corrective action, if necessary, can be taken, and the marketing mix be modified accordingly. Post purchase behavior is the reaction of the consumer; it gives an idea of his likes and dislikes, preferences and attitudes and satisfaction towards the product. It indicates whether or not the purchase motives have been achieved. Purchase is the means and post purchase is the end. Post purchase behavior indicates whether or not repeat purchases will be made. Whether the costumer will recommend the product to others or not, it indicates whether long term profits can or cannot be expected. All this can be found out by the post purchase behavior of the customers. Post purchase is the last phase in the decision-making process.

After purchasing a product, a customer is either satisfied or dissatisfied and his satisfaction or dissatisfaction depends on his expectation and the difference between the performances. Expectation gives the degree of customer's satisfaction/dissatisfaction with the product.

However, there can be a match between the two, i.e. performance is in line with expectation. In another position is the product which surpasses the expectancy level, and performs much better than expected. This is a source of satisfaction and delight to the customer. Satisfaction or dissatisfaction cannot be generalized, i.e. there is no accepted definition of satisfaction or dissatisfaction.

It is the effort of every firm to produce satisfied customers. This is essential to fight increasing competition. Some unsatisfied customers however remain repeat purchasers, as they do not find a suitable alternative or, find that brand readily available and buy it due to force of habit or, because of low price. These purchasers may not be brand loyal. A brand loyal or a committed customer is attached to the brand emotionally. He believes in the firm and trusts the brand. Brand loyalty increases if the performance of the brand is more than the expected performance. In case of committed customers, they believe and have faith in line extension and brand extension of the firm. Committed customers also promote the product by positive words of mouth.

**Role of a Marketer:** - The marketer has to watch that the customer is not dissatisfied. Through dissatisfaction, a lot of customers or clientele is lost and the marketer suffers losses. To avoid this, a marketer has to be on the look out for causes of dissatisfaction and maintain and build consumer satisfaction. This can be done by regularly monitoring consumer reaction. It can be done by interviewing the customer or serving questionnaires and analyzing and interpreting them carefully. Besides this, a strict vigil is to be kept on the quality of the product. The quality should be the joint responsibility of marketing and production. If necessary, other departments should also be involved, and an integrated marketing procedure be followed.

In case of complaints, they must be given proper attention and redressed be made as soon as possible. All complaints must also be acknowledged to satisfy and assure the customer that appropriate action will be taken as soon as possible. While registering complaints, due courtesy should be

shown to visiting customers and their complaints be entertained in a proper manner. To avoid dissatisfaction of the consumer, only realistic claims are made i.e. advertisement of a scooter giving 55km. per liter may be unrealistic when it can give a maximum of 40km. This unrealistic claim made by the manufacturer may lead to dissatisfaction of the consumer. The marketer must also help train the consumer for the proper use of the product. If the product is not used in the way it is meant to be used, it gets spoilt, and does not perform up to expectation leading to a discrepancy between the actual and desired which leads to dissatisfaction of the consumer. A marketer must also assure after sales service and keep in touch with the consumer even after purchase, to give him the promised after sales facility, as well as, importance to the consumer. A marketer must also sell solutions instead of the product. He should emphasise upon of the felt need and fulfill it, rather than emphasise the product. He should take care of the marketing concept. If this is not taken care of, it becomes injurious in the long run.

In case of dissatisfaction post purchase dissonance occurs which creates anxiety and the consumer feels psychologically uncomfortable. If the disparity between performance and expectation is not great an assimilation effect occurs and consumers ignore the product's defects and their evaluation is positive. If the disparity is great a contrast effect takes place and repeat purchase does not take place.

**Product versus Service Consumption:** - Products are tangible while services are intangible and the consumption experience is more variable while traveling one trip can be pleasant, other trips may be unpleasant. Once the service can be courteous then it can be discourteous. It is



therefore difficult for consumers to assess service rather than those products. Therefore marketers must reduce service variability and build a long term customer relationship.

**3.9 Changing Consumer Behavior**:- The consumption pattern and the behavior of the consumer have been changing gradually. Since the last two decades we have seen many changes occurring in the attitude, perception, motivation, spending habits, purchase, and post purchase behavior of the consumer.

The consumer of the 80's was austere and bought those things that were needed by him and the household. He was not very adventurous in spending habits. He had the restraint put on him by low income, the non availability of products and traditional methods of buying. Most of these were for all the classes of consumers the upper or lower income groups. Even if they had money and the willingness to buy, they could not purchase because of the limited choice of the product, even after having booked the same a few years earlier. Many products were not available in the Indian market due to import restrictions, and the consumer had to depend on the product smuggled in, from foreign countries and paying heavy duty on them. Under these conditions the entire definition of consumer behavior was put to limitations. "Consumer behavior is a decision making process and physical activity engaged in while evaluating, acquiring using and disposing of goods and services."

In 1990's, When the products available in the market were few there was hardly any physical activity to be performed. By physical activity we mean the effort made to analyze the products and do their comparative

study, according to the desired attributes. This led to the evaluation of the product with every few and limited attributes that one could visualize. Even if the mindset for the purchase was positive, it was difficult to purchase as the products were in short supply and there was hardly any competitors. The process of evaluation purchase was reduced or had little to develop. Even after the purchase, the factor of satisfaction and dissatisfaction had little meaning as you had to be satisfied the best that was available, and the customer could not inspire for more than what was offered. One could dispose off the product after use with little difficulty.

In the new millennium however, the consumer behavior has changed much. The consumer of the 80's had less discretionary income and with liberalization in 1985 to globalization taking place since 1991 a whole lot of goods flooded the Indian market. Like refrigerators, washing machines, black and white TV, colors TV, VCR's, Cars, Scooters, Motorcycles, cosmetics, gas cylinders, cellular phones, microwave ovens, internet, ATM cards etc, Marketing through TV and internet became possible. Moreover, fast food centers with home delivery of snacks food and drinks gave the consumer options. A lot of avenues were opened for travel and communications, PCO, STD, FAX; photocopy machines were available almost at every crossing.

New innovative marketing techniques, branding the product, suited the Indian style. The Indian consumer is very price conscious, and to suit the consumer changes in the product. Changes have been taken place in the Indian consumer due to innovation in the product, in liberalization and the marketing mix.

The behavior of today's customers is changed due to the economic liberalization and economic crises. He does not have to buy sub quality and shoddy products. He can dictate his terms, and as somebody has rightly stated. "The customer is not only the king but also the queen, the prince and the princess." He can choose from a plethora of brands, return the product if not approved. Can take a free trial, negotiate and bargain. He can reject and accommodate. He can use credit cards, buy houses, cars, flats on easy installments and can even get rebate from taxes, by taking a loan for a home etc.

He can access abundant information through the internet. The marketer is happy to provide service to him free of cost. It is the service that plays an important role in promoting products and brands. Marketers are all out to differentiate their products with plans of service, price, packaging, branding, promotion etc. Celebrities are being used to promote products Coca cola, Pepsi, "Yeh Dil Mange more", Maharaja of Air India and other brands have been globalize.

The marketers have adopted a new strategy. They have modified the old strategies, broadened their visions and are aware how they have to provide services. Adjust themselves to the customer and not the customer to them. The marketers are not satisfied with just satisfaction. They are going beyond the expectation of the customer and are delighting the customer and even to make them ecstatic with the product and services offered.

This is the age of modern marketing and the age of taking risks. This is the age to establish your identity through the use of marketing mix, proving services, giving that little extra to the customer that created the required differentiation between one product and the other. This is the age of

positioning and the age of providing service. This is age of relationship marketing and the age of studying the further expected changes in the behavior of the consumer. Communicating with the customer is the core of good customer service. "Coming together is the beginning, keeping together is progress and working together is success."

In the age of information technology the consumer who can not be seen or meet are the Cyber consumer. The computers are being put to wide use. They are being used for business and domestic purposes, for government work, for buying and selling, for recording and retrieving information, for electronic communication with the greatest of ease, and they are used all over the world. Companies have been working towards computerization, and the first commercial computer was given to the world in 1924 by I.B.M. Computer education started in 1928, and today it has changed the entire concept of business and mankind. Right from railway booking which entailed long queues at the reservation counters, to accessing the latest information, things have become much easier and methodical. In the beginning, emphasis was given to programming in various languages, Pascal, COBOL, FORTRAN etc., and then we had the transition to three generation languages, and now the E-Business, Which can be described as the method of doing business electronically, which has now become an integrated discipline.

In 1990 online services were started which provided a new form of social interaction, such as Inter relay chat (IRC) and knowledge sharing, such as new groups and file transfer programmes. Social interaction led to the concept of "global village". By using the global internet, people can exchange information and can communicate with each other at a much

lower cost. In 1990, the WWW (World Wide Web) provided an easy to use technology solution, to the problem of information publishing and dissemination. It enabled more diverse activities in Business.

E-Business Marketing is the direct marketing online, and through this media advertisements can easily reach the consumer's door step. It provides information through Internet and online services for buying and selling products and exchange of information. It cuts service cost for the marketing and improves the quality of goods and services, and increases the speed of delivery. "E-Business enables business to be transacted at the rate of thought." Business challenges can be overcome, competition can be met, and strategies can be evolved to meet the competition. E-business enables to be transacted globally with out any significant barrier. Voluminous and repetitive documentation can be eliminated. It enables differentiation for competitive advantage.

It provides effective Management information and helps in decision making. It helps to manage the customer chain and integrates it with the supplier chain. There is better management of marketing. It leads to reduction in the cost of doing business. There are no geographical boundaries and targeting individual clients is less costly. There are fewer middlemen, there is quick order execution, faster realization of money, client has much wider choice and he can choose from products offered globally. It also helps in booking airline and train tickets you from your home and office. You can have access to Bank transaction and to billing online.

**Advantage to the consumer:-**E-Business or Electronic Business has brought a revolution in many fields. It has also changed the entire concept

of selling and buying. It has changed the thinking of the consumer. It has changed the decision making of the consumer and physical activities associated with the decision making process have been reduced tremendously. Consumer using the Internet can improve the expectation of their business. They can generate and exploit business opportunities with greater efficiency and speed. They can 'generate business value'. It gives the consumer advantage of getting better quality products by using interconnected networks, greater consumer satisfaction, delight and greater economy is guaranteed. It saves time and gives greater speed of transactions and delivery. These change not only the thinking of the consumer, but can bring vast changes in the consumer behavior.

After all, it has been earlier pointed out that consumer behavior is the decision making process and physical activity engaged in, while evaluating, acquiring, using and disposing off goods and services. Information based transactions are therefore creating new business opportunities and new ways of doing business. The need for E-Business arose for better computing, better interaction between sellers and buyers, and both inside and outside the business organization.

The use of it in banks in the transfer of money within minutes all over the globe, not only saves time, but also saves interest on the money which takes days to get transferred from one bank to the other across the globe. Traditional business methods of using paper and post are becoming obsolete and the same transactions now take a matter of minutes. This is hold good for purchase, sales, sending of documents and money to any part of the world. This is known as EDI or Electronic Data Interchange. The Electronically managed system provides a look into the store. The

products are divided into various categories. One can see the product, and order electronically and the payment is also made electronically. It provides a look into the store's display and the arrangement of the shelves. A variety of brands with varying prices, sizes and information about the ingredients of the products can be seen as well.

Concerning with business to customer transactions, the customer is always looking for the ease of purchase, convenience, low prices, good quality and proper service. Electronic Business provides the consumer with convenient shopping from online catalogue, to electronic banking which eliminates costs. It eliminates many intermediary steps. It provides video conferencing for better interaction and information. Consumer cannot be seen nor met. The consumer can conveniently transact the business according to his needs.

Web, as we all know, is a net made by the spider. In Computer terminology, it is a standard for navigating, publishing information and executing transactions. Companies use the web for communication with customers and suppliers, by publishing contents on their web server for widespread distribution. Many companies are selling their products on products on the web. A number of functions are performed including advertising, sales, customer service and marketing. Information transfers from bank to bank, bank to customers, business to customer, and even entertainment functions can be undertaken. The web can perform a number of tasks. These include attracting new customers via marketing and advertising.

Servicing existing customers via customer service and support functions, developing new markets and new distribution channels for existing

products, developing new information based products. It also includes brand name management, exhibiting product catalogues and sales information and new product announcements.

It is useful in handling customer queries that would otherwise be handled by a service representative. It can handle many customer oriented tasks. Software can be delivered from one computer to another, within no time. Customers can check their personal bank accounts. They can know their balances and recent transactions which help to make better and quick decisions.

They can trace their parcels or packages as to where they are kept, or to what point of destination they have reached and when. The interaction with the government agencies has also become more accessible and useful. Tax information, employment opportunities, and changes in rules or tax structure are also accessible with the press of a button.

**Application to Customer Behavior:-**Consumers keep making decisions to buy the products of their choice. As we know that the decision making is influenced by the internal determinants which include learning, memory, personality, self concepts, attitude, motivation and involvement. The external determinants consist of cultural and sub-cultural influences, social group influences, family influences, social influences and other influences. External and internal influences thus, together influences the decision making process and most customers follow these steps in a logical manner. E-Business enhances this process, and saves time of the consumer by providing all relevant information on the internet that is required.



A problem is recognized when there is gap between the existing and the desired position in the use of a product by the consumer. This gap may be caused by a number of factors, and it has to be reduced for the satisfaction of the consumer. E-Business provides the customer with more information regarding products and services. The customer, therefore, has a better understanding of the solving of these problems and starts demanding products which were earlier not available locally. He has higher aspirations and fulfils his needs in a better way.

Once the problem is recognized, the customer can find the alternatives to solve the problem on the customer. It gives enough and sufficient information to a consumer to choose. It provides many alternatives which can also be evaluated by mathematical models in the case of extensive problem solving, where more money and time is at stake. The evaluation of alternatives can be done speedily, and the advantages and disadvantages of various brands and products can be recognized. This also depends on the weight ages given to different desired attributes in a product and making assumptions on a comparative scale. Internet can give comparative charts for making evaluation easier and rational. Information process becomes easier and the area of information is enlarged greatly.

E-Consumer is fully informed consumer and is aware of various products offering by all competitors. His purchase decision can not be influenced easily. He takes rational decision usually decides to go for a product that offers good value for money. He also knows the advantages and disadvantages of when to buy, how to buy, from where to buy, what to buy, and from whom to buy.

After using the product and service consumers can electronically interact with the manufacture or marketer giving valuable feedback. The critical feedback should be given to the company regarding improving the product. If the consumer is dissatisfied, he may communicate his anger against the company to lakhs of people worldwide instantly. This may affect the reputation and goodwill of the company and tarnish its image. A satisfied customer acts as a best advertising and promotional means of worldwide publicity at no cost.

The theoretical study of consumer behavior cannot be overlooked and remains an important aspect, in spite of the development of E-Business. The theoretical framework of consumer behavior has to understood and applied in the application of E-Business for proper marketing results. E-Business does not replace, but supplements the theoretical foundation of consumer behavior.

**3.10 Public Policy and Consumer Protection**:-In the earlier decades the consumer was unorganized and was generally taken for a ride. Today, the consumer is aware of his rights and is highly educated and experienced. He was earlier being exploited in many ways. These were the adulteration practices of the manufacturers and middlemen. Variations are in the contents of the pack, misleading and deceptive advertising which led even the educated consumer to buy unwanted and unnecessary goods to a large extent. Consumers also complained and criticized the factors like price, quality, advertising, packing, distribution, after sales service etc. There were many unfair trade practices prevalent in India, some example are given below:

**Advertising** of scooters and cars claim a much exaggerated average per litre than the actual. The sale of magic rings is for the cure of diseases like blood pressure and diabetes. The sale of medicines claims to increase the height of children, and other unbelievable claims. Adulterating the food with cheaper stuff to increase the weight of the product, like adding papaya seeds to black pepper to increase the bulk and weight. The examples show that the attitude of business towards consumers has been very indifferent. This mostly happens in a sellers market, but where there is competitive selling or sellers are many, the needs of the consumer are the first priority, and the marketing concept is being practiced.

The exploitation of the consumer has led to the creation of the consumer movement also known as consumerism. Consumerism is the range of activities of the government, business, and independent organization that are designed to protect the consumer from the unlawful practices of that infringe upon their rights as consumer. There has been an awakening in the consumer and the government has passed many laws and statutory obligations that must be adhered to, by companies.

The consumer protection Act, 1986 has provided a legal umbrella to safeguard the interests of consumers and to give them cheap and speedy justice. In order to know the significance of the consumer protection Act, 1986, a bird's eye view of the provisions may be made, and then it can be assessed whether the enactment has really given relief to the consumer.

**Aims and objective of the Act:** - In the statement of objects and reasons it is said that since the Act seeks to provide speedy and simple redressal to consumer disputes, a quasi-judicial machinery is sought to be set up at the District, State and Central levels. These quasi-judicial bodies will observe

the principles of natural justice, and have been empowered to give relief of a specific nature and wherever appropriate, compensation to consumers. Penalties for non-compliance of orders given by the quasi-judicial bodies have also been provided. It shall be the duty of consumer's councils to promote and protect the rights of the consumers. In Section 6 of the Act, a provision for consumer's councils has been made. It provides a list of the rights of consumers they are:

- (1) Protection against hazardous goods.
- (2) Right to information.
- (3) Right to access.
- (4) Right of proper hearing.
- (5) Right to seek redressal.
- (6) Right to consumer education.

**REFERENCE-**

1. Blackwell R.D., Miniard P.W. and Engel James F., (2003), "Consumer Behavior" Vikas Publishing House Ltd, New Delhi, India.
2. Chinnadurai M. and Kalpana B., (May, 2006), "Promotional Strategies of Cellular Services: A Customer Perspective", Indian Journal of Marketing, New Delhi, India, volume 36 (5), pp 29-37.
3. Desai Raghunath, (2007), "E-Banking" Srishti Book Distributors, New Delhi, India.
4. Dudija V.D., (2006), "Retail Business" Commonwealth Publications, New Delhi, India.
5. Deva Vasu, (2003), "E-Commerce-A Manager's Guide" Commonwealth Publishers, Delhi, India.
6. Deva Vasu, (2003), "E-Banking" Commonwealth Publishers, Delhi, India.
7. Diwan J.N., (1999), "Marketing Management" Commonwealth Publications, New Delhi, India.
8. Hugar S.S. and Vaz Nancy H, (June, 2008), "An Evaluation of Customer Orientation of Indian Public Sector Banks." Indian Journal of Marketing, New Delhi, India, volume 38(6), pp31-40.
9. Hellofs Linda and Jacobson Robert. (January, 1999), "Market Share and Customer Perceptions of Quality." Journal of Marketing, New Delhi, India, volume 63(1) pp16-25.
10. Khan Matin (2004), "Consumer Behavior" New Age publications New Delhi, India.
11. Kapoor D.C., (2004), "Marketing and Sales Management" S. Chand & Company Ltd, New Delhi, India.

12. Kotler Philip, (2003), "A Frame Work for Marketing Management" Pearson Education Private Limited, Delhi, India.
13. Naik C.N. & Reddy L.V., (1999), "Consumer Behavior" Discovery Publishing House New Delhi, India.
14. Oberai Preeti, (2002), "Customer Relations" Sawrup & Sons Publications, New Delhi, India.
15. Oliver Richard L, (Special Issue 1999), "Whence Consumer Loyalty" Journal of Marketing, New Delhi, India, volume 63(Special Issue 1999) pp33-34.
16. Ramachandran Smitha, (July 2008), "An Overview of Customer Management in Retail Banking," Professional Banker; The ICFAI University Press, Hyderabad, India, volume 8(6), pp32-35.
17. Patnaik U.C. & Chhatoi Basudev, "Bank Marketing" Sonali Publications, New Delhi, India, 2006.
18. Pandey V.K., (June, 2004), "An Analytical Study of Consumer Behavior in the Financial Services Industry in Eastern UP in India." Indian Journal of Marketing, New Delhi, India, volume 34(6) pp 26-30.
19. Pezzullo Mary Ann, "Marketing Financial Services" The Indian Institute of Bankers, Macmillan Publications, Delhi, India.
20. Raju M.S. & Xardel Dominique, (2008), "Consumer Behavior" Vikas Publishing House Ltd, New Delhi, India.
21. Saurabh Goyal and Thakur K.S., (July-December 2007), "Comparison of Customer Satisfaction in selected Public and Private Sector Banks." Journal of IPM Merrut, India, volume 8(2), pp35-36.

22. Singh Yogesh kumar, (2006), "Fundamental of Research Methodology and Statistics" New Age International Publishers, New Delhi, India.
23. Sinha Arunabha, (2005), "Rural Consumer Behavior" Sonali Publications, New Delhi, India.
24. Sudhakar Francis and Nutan Lydia, (May, 2005), "An Objective Study of Customer Behavior in BPL Mobile Cellular Ltd." Indian Journal of Marketing, New Delhi, India, volume 35(5) pp10-11&22.
25. Sadar S.B. and Fulzele T.U. (May, 2005), "Consumerism: Where does Consumer see himself?" Indian Journal of Marketing, New Delhi, India, volume 35(5) pp15-20.
26. Schiffman Leon G. & Kanuk Leslie Lazar, (2004), "Consumer Behaviour" Pearson Educations Private Limited, Delhi, India.
27. Srivastava Ashish Kumar and Sengupta A., (June 2004), "A Peep into the Mindset of the Consumer." Indian Journal of Marketing, New Delhi, India, volume 34(6) pp 13-15.
28. Singh Rajmani and Yarso A.S., (May 2002), "Consumer Behavior and Consumption Pattern of Toilet Soap in Imphal City, Manipur." Indian Journal of Marketing, New Delhi, India, volume 32(6) pp18-22.
29. Virani Varsha, (September 2008), "Customer Awareness and Perception towards Banking Channels of Kotak Mahindra Bank." Professional Banker, The ICFAI University press, Hyderabad, India, volume 8(9) pp66-70.
30. Vohra Munish, "Consumer Behavior" Anmol Publications Private Ltd, New Delhi, India, 2006.

## *Chapter 4*

# **Development of Electronic Money with Technological Changes**



---

## **Development of Electronic Money with Technological Changes**

**4.1 Introduction:** -Today about half of the transactions in the US economy are still paid for in cash (currency, bills and coins). The other half involves noncash transactions of which about 70 percent involves by cheques. While accounting for only 30 percent of noncash transactions, electronic payment methods involving credit cards, debit cards, wire transfers and Automated Clearing Houses (ACHs) have been growing more rapidly than the number of transactions conducted by cash or cheques.

Traditional forms of paper money still offer to users certain unique advantages. Cash denominated in 'hard' currencies is also popular in places where the local currency is not trusted. Access to cash has been bolstered greatly by the dramatic increase in Automated Teller Machines (ATMs) whose number has tripled in the United States over the last decade 75,000 terms in 1989 to 2, 35,000 in 1999. These ATMs, which lower the operating costs of the banks, allow bank customers to conduct various banking activities with the help of computers which operate faster, more reliably and more cheaply than human bank tellers. By linking their ATM networks, banks have found a way to by pass geographic branching restrictions and operate nationwide, even globally organized banking networks.

The other dominant form of paper money, namely cheques backed by demand deposits at banks, still remains by far the preferred form of noncash payment among consumers. Having been around for over a century, they are familiar, widely accepted and fairly convenient. Anyone writing a cheque has the feeling of 'hands-on' control over a given payment, a significant psychological advantage compared to less tangible payment methods using computers. Like cash, cheques, enable individuals to make payments to other individuals. Cheques, however, are very expensive to process. The cheque clearing mechanism set up by the Federal Reserve, the US central bank, in 1998 is a cumbersome and costly affair. Cheques travel from the bank, in which the cheque was deposited, via the regional Federal Reserve banks to the bank on which the cheque was drawn, and back. Each of these steps demands a good deal of paper work from the parties' concerned. Since cheques have to be physically moved from bank to bank, they also involve considerable transportation costs, including the operation of a large fleet of airplanes and trucks deployed each day by the regional Federal Reserve banks for the movement of cheques between states. Any delay in cheque-processing creates a loss of income which could have been earned from investing cash earlier. This opportunity cost has become more important now that (deregulated) interest rates tend to be fairly high.

In recent years the banking sector has intensified its efforts to automate the cheque-collection process. The most promising step in this direction so far has been the use of Electronic Cheque Presentment (ECP) technology in which the payment information on a paper cheque is transmitted by computers between the banks involved to make the cheque-collection process faster, more efficient and less costly. Today one in five cheques is

presented electronically. Driving cheque electronification one step further, the Fed is currently experimenting with electronic cheques which have become possible because of dramatic improvements in digital imaging technology. It has launched pilot programs offering digital images of truncated cheques to ECP customers over the internet. E-cheques may eventually evolve into a popular and convenient payment mechanism for online transactions.

Even though cash and currency remain dominant, America is certainly moving in the direction of paper-less electronic payments. On the retail level, we can witness the rapid growth of credit card transactions. Such credit cards, of which there are now over half a billion in circulation within the United States alone, essentially represent a revolving line of credit to consumers. Their use in transactions authorizes funds to be removed over large electronic networks linking credit card holders, merchants their respective banks and the credit card companies operating those networks. An agreement in February 1996 between master Card and Visa, the two dominant credit card companies, to introduce a single 'Secure Electronic Transaction' (SET) format for credit card purchases on the internet paved the way for the take off of e-commerce.

Another increasingly popular means of electronic payments on the retail level are debit cards of which there are already 250 million in the United States. These can be used for ATM transactions and in Point of Sale (POS) transactions at retail stores equipped with specially fitted terminals. Having the convenience of combining ATM and POS capabilities on a single card, such debit cards can be presented to a merchant just like a credit card for payment. But unlike credit cards, which involve credit,

debit cards are linked to a customer's bank account from which the amount of the transaction is immediately debited. Such debit cards began with the spread of ATM networks which connected the ATMs of different banks for reciprocal use by their respective customers. Their use expanded to off-line retail purchases when Visa and Master card opened up their electronic fund transfer networks for debit cards in the early 1990s, promoting a rapidly growing number of merchants to equip their stores with POS terminals hooked to banks. Debit-card transactions finally moved online a few years ago, routed through the same networks as the banks' ATM transactions.

The growing popularity of plastic cards has given Visa and Master Card a powerful position in America's payment system. Together these two companies, which are associations owed by the banks issuing those cards, control about 75 percent of the US credit card market. The two companies have parlayed that market power into securing control over debit cards as well. Once use of those debit cards extended beyond ATMs to POS terminals at retailers, the banks came to depend on the processing networks run by Visa and Master card. Both then imposed 'honour all cards' rules which force merchants to accept any card bearing their logo, whether credit or debit card. Acting in effect as a duopoly, they have saddled merchants with considerable processing charges. In the case of credit cards these may reach 6.5 percent of the transaction where as in the case of debit cards the charges can amount to 4.5 percent per transaction.

While plastic cards dominate retail banking, electronic-payments services in wholesale banking used by corporations, financial institutions and government agencies are entirely instruction-driven. Key in this area is so

called wire transfers for which we have created two distinct networks. Fed wire is operated by the Federal Reserve and used primarily to settle domestic inter-bank transfers. The Clearing House Inter-bank Payments system (CHIPS), operated by a consortium of the banks grouped together in the New York Clearing House Association, principally settles foreign-exchange transactions.

A third type of electronic- payments system uses a network of Automated Clearing-Houses through which financial institutions can transfer funds to each other on behalf of their clients, may be they consumers, businesses, or government agencies. Such fund transfers are processed, distributed and settled by a central clearing facility, the ACH operator. Today three private ACH networks i.e. Electronics payments Network, American Clearing House Association, and Visa Net ACH account for all ACH transactions in the United States while the Fed controls the rest. After a quarter of a century in existence, ACH transactions have become entrenched in a variety of payment arrangements, especially direct deposit of salaries and government benefits into the checking or savings accounts of individuals. Three quarters of America's retirees receive their Social Security benefits that way, and half the US work force gets paid through automatic payroll deposit in the employee's bank account. ACH networks make it easy for consumers to pay automatically recurrent mortgage and utility bills while businesses use ACHs to pay suppliers, contractors, or the government. Even the US Treasury sends most of its payments nowadays via ACHs. Given these widespread uses, ACH networks in the United States are used by nearly half of all Americans, over 2 million businesses, and 20,000 financial institutions.

The arrival of the internet promises to boost the volume of ACH transfers, thanks to two innovations. The first is known as Cheque Conversion where by a paper cheque is converted into an ACH transaction at the moment of payment so that a paper cheque never enters the system. Several web sites have recently begun to offer online cheque conversion services for e-commerce payments where the customer first provides cheque information after which the amount in question gets routed through the ACH network. The second innovation is Electronic Bill Presentment and Payment (EBPP) enables utility companies, merchants and financial institutions to use the internet for transmitting bills and account statements to customers and receiving payments and remittance information from those customers in return. EBPPs are processed by ACH networks whereby they can be automatically debited from a customer's checking account or posted to a credit card account.

Spurred on by the growing use of computer and communication technologies, banks have brought us to the threshold of electronic money. Their efforts to Automate Fund Transfers (AFT) have penetrated our payment system and so prepared us for the introduction of cyber cash. Cash has been transferred by ATMs which in turn have given rise to debit cards and POS terminals. Cheques are in the process of being converted from paper into electronic format. As e-cheques, they may evolve into an early version of cyber cash capable of mass use. The widespread use of credit cards has habituated the public to 'plastic money' to a point where a majority may be ready to accept so-called smart cards. Equipped with microprocessors and capable of network connectivity, such smart cards may soon become a key component of cyber cash. Electronic Fund Transfers already dominate the world of wholesale banking, notably wire

transfers and ACH networks. The internet promises to extend the use of ACH fund-transfer technology from wholesale banking to the mass market of retail banking, coupled with the diffusion of electronic billing. All these innovations in the direction of automating our payments system have created a socio-technological infrastructure for computer-based money from capable of replacing paper money, be it cash or cheques.

#### **4.2 Defining Electronic Money: -**

Electronic Money is a broader concept referring to all computer-based fund-transfer mechanisms and their access hardware. Cyber Cash is a more narrowly focused term applying to all fund transfer systems routed through the internet. It is hard to distinguish clearly between 'Electronic Money' and 'Cyber Cash' because the former has set the stage for the latter and is now gradually merging into it.

Official definitions, provided by the world's leading central banks grouped together in the Bank for International Settlements (BIS) as their umbrella organization, ignore the distinction between 'Electronic Money' and 'Cyber Cash' altogether. They only refer to the former, never to the latter. Dating to 1996-97, these BIS definitions capture more than a decade of efforts by banks to automate their payment services through a variety of proprietary computer and communication networks. But these definitions came too early to reflect the emergence of cyber cash as the next stage in the evolution of electronic money. The internet provides a centralized and global network which will eventually absorb and replace all the autonomous fund- transfer networks setup by banks during the first phase of money automation. E-money is about to be turned into cyber cash.

These definitions always refer to three specific e-money variants which at the time had already emerged as coexisting alternatives, but which also represent different stages in the leap from electronic money to cyber cash.

The first and least advanced form of E-money is referred to as access products. These are electronic means of communication, such as computers, which enable consumers to access otherwise conventional payments services. Credit cards payments on the internet would fall in that category, as would most online banking activities. Cheque conversion, which replaces paper cheques with ACH transfers, would also qualify.

The second type of electronic money consists of 'store-value' cards with which to execute payments via POS terminals, through devices that are directly connected to each other through internet. Such prepaid cards, which sometimes are also referred to as electronic purses, store value in as much as they contain a record of spend-able funds in the card-holder's possession. This type of electronic money involves hardware, specifically the cards and connection devices.

The third type of electronic money included in the BIS definitions of 1996-97 was at the time the least developed, but has the greatest potential to become the foundation for cyber cash in the future. The software based E-money products, also called 'digital cash', and is typically designed to make payments through networks of interconnected computers notably the internet. While software-based E-money does not involve any kind of hardware associated with card based E-money and thus may be less costly setup, it requires the distribution of software to consumers and merchants who will have to install it on their computers.



### **4.3 Electronic Banking: -**

Electronic banking is not a new phenomenon. It began in 1871, when the Western Union Telegraph Company, headquartered in Rochester, New York, began to offer a nationwide money-transfer service. The Fed wire began as a telegraph system in 1918. SWIFT and CHIPS payments systems began in the 1970s. In 2000, Western Union, which is now owned by First Data Corporation, offered its services over the internet.

About 80 years later there was another major innovation that did not receive as much alternation from the public. It was the 1950 development of Magnetic Ink Character Recognition (MICR) used in connection with reading and sorting cheques by both humans and machines. Without MICR, it would not have been possible for our paper-based system to process about 70 billion cheques used in the early twenty- first century.

In 1951, the first credit card was issued by Franklin National Bank (New York), and in the early 1970s, the first ATM machines came into operation at City National Bank of Columbus, Ohio, the predecessor of Bank One. In 2000, there were about 2, 85,000 ATMs in operation in the United States and about 9, 52,000 worldwide.

**Faster, Better and Cheaper:** - Although internet banking can provide a wide range of financial services, they are at a disadvantage compared with brick and mortar cash which raises the issue of convenience. Internet banks are sometimes also called virtual banks. Nevertheless, advocates of internet banking claim that it is faster, better, and cheaper than brick and mortar. Faster, better, cheaper has become the mantra of electronic

commerce, whereas anything, anytime, anywhere has become the mantra of consumers.

Convenience refers to the capital, labour, time, and other responses that are needed to make transactions. Customers with computer modems can access banks by using banking software installed on their personal computers, Local Area Networks, or mainframe computers that connect to the bank. Others may use internet service providers in order to access banks through their web sites. Banks may operate their online systems in-house, or they may use third-party vendors.

Confidence refers to the trust that the parties have in the transactions that generate risks. The risks, which include operational, security, and legal risks, affect both the users and providers of such services. Trust also includes privacy issues.

Finally, complexity refers to the ease of making the transactions. To some extent there are trade offs among these factors. Greater convenience may increase security risks, and greater complexity may reduce convenience. The financial services industry, including banking, securities, and insurance, is an information industry that makes extensive use of electronic banking.

Control over the payments is another factor that will affect internet banking. Control includes the ability to review bills, initiate payments, talk to a person, and other factors. It ranked as one of the most important considerations by consumers in their use of electronic bill paying services. In addition, use of cheques instead of electronic payments gives some

control over 'float' and 'controlled disbursement' which are designed to speed collections but slow disbursements.

Profitability depends in part on the quality of products and services that banks offer and in part on costs. The transaction cost of internet banking is substantially less than that of the other channels of distribution. The non interest expenses of internet banks tend to be higher than those of brick and mortar banks. Moreover, pure internet banks have not proved to be very profitable, and as a result, many banks are retrenching and combining their internet banks with brick and mortar banks. This may help to banks to explain their planes and sell their products on the internet.

**Retail Internet Financial Products and Services:** - Electronic payments exceeded paper-based payments in the industrialized nations of the world for the time in 2000. According to Mester, by 1998, 86 percent of households used some form of electronic payment, with ATMs and direct deposits being the most widely used. Growth of retail electronic payments in the United States is being driven by the increased use of credit cards, debit cards, and Automatic Clearing House (ACH) transactions. Credit and debit cards provide fee and interest income to the issuers who encourage their use, which is growing. Nevertheless, a survey reported by Mester found that cash is still the most widely used means of point-of – sale payment, through its share of payments slipped from 79 percent in 1992 to 53 percent in 1997.

Of the non cash transactions (cheques, credit cards, debit cards, smart cards, ACH, and wire transfers), cheques were the most popular means of payment, followed by credit cards. Although consumers are using

cheques, organizations involved in the payments system are converting paper cheques to electronic transactions that are cleared through the ACH system. Credit cards are the second most popular means of non cash payments, accounting for 18 percent of the total. In 1998, 68 percent of all U.S. families surveyed by the Federal Reserve had credit cards, compared to 16 percent in 1970. However, they are the most popular means for transactions on the internet. Internet transactions are a small but growing percentage of over all payments.

Finally, new payments mechanisms are being created by wireless technologies. Robert Selander, president and CEO of Master Card International, sees a strong competitive threat from telecom companies that let consumers in some countries buy goods by using their wireless phones and charging the cost of those goods to their phone bills.

**International Wholesale Payments Issues:** - The Society for Worldwide Inter-bank Financial Telecommunications (SWIFT) is a financial industry cooperative that dominates the market for messages converting secure international money transfers and settlement between banks. The efficient flow of information about customers is at the heart of the financial services industry. The winners in the information-based financial service industry will be those firms that master the management of information and use it to give their customers what they want, when and where they want it.

In order to protect consumers, financial institutions are required to provide privacy notices "at the time of establishing a customer relationship" and annually thereafter. The privacy notices contain the type information that

may be collected and how it may be used. Financial service providers argue that the cost of restricting the use of consumers' information reduces the quality of services that can be provided to them, including slower responses for loans, and affects the ability of firms to offer products and services that are most suitable for the consumer.

Although most of the type about electronic banking focuses on retail banking activities, the greatest dollar volume is on the wholesale side. Business-to-Business (B2B) domestic payments systems that is faster, cheaper, and better than the current paper based system. However, companies are not rushing to the new Internet Billing Presentation and Payments (IBPP). Many large companies currently use Financial Electronic Data Interchange, (FEDI, sometimes called EDI), which has some of the features available on IBPP.

#### **4.4 European Union Definitions of Electronic Money: -**

According to the "Report on Electronic Money," published by the European Central Bank in August 1998, "Electronic Money is broadly defined as an electronic store of monetary value on a technical device that may be widely used for making payments to undertakings other than the issuer without necessarily involving bank accounts in the transaction, but acting as a prepaid bearer instrument."

According to Article 1 of the European Parliament and Council Directive 2000/46/EC, "Electronic money shall mean monetary value as represented by a claim on the issuer which is: -

(1)-stored on an electronic device;

- (2)-issued on receipt of funds of an amount not less in value than the monetary value issued;
- (3)-accepted as a means of payment by undertakings other than the issuer."

Historically, four major innovations have influenced how people have paid for things with money: metallic coins, cheques, paper money, and payment cards. Now fifth innovation electronic money can be added to the list. Regulating electronic money raises separate but related issues. In general terms, electronic money refers to the variety of ways that electronic and other payment system can be used as a means of exchange. It includes privately issued credit cards, debit cards, stored value cards, digital cash (also known as electronic money, cyber cash Flooz, etc.), and other electronic forms.

Privately issued money currency is the currency which is not backed by the government in the United States dates back to colonial times. Travelers cheques issued by American Express, Cook's, and Visa, as well as stored value cards, are current examples of private money.

There are advantages and disadvantages to each form of money. According to Harvey Rosenblum of the Federal Reserve Bank of Dallas, the major advantage of the current paper system is that it works it is cheap, it is reliable, and we trust it. The disadvantages are that paper currency can be lost or stolen, and there are no records of cash transactions. Furthermore, you can not send cash to someone over a phone lines. Electronic money such as Mondex electronic cash can be sent over

telephone lines without delay. To date, electronic cash systems have found very limited acceptance in the United States.

If the privately issued electronic money were to become widely accepted, it could threaten the safety, uniformity, and stability of U. S. currency. Privately issued currencies could produce different values of exchange due to lack of acceptance or the risk of default, and the increased risk of fraudulent electronic currencies.

Privately issued money is not legal tender. Stated otherwise, unlike U.S. currency, electronic money it is not suitable for payment of all debts, public and private. Moreover, electronic money is not backed by the U.S. government.

U. S. and foreign regulators today are faced with the choice of letting the market regulate itself or of limiting who can issue electronic money and stating the conditions under which it can be done. However, a very strong case can be made for some regulation. One rationale for bank regulation is to achieve certain social goals, such as protecting consumers. That is the same rationale applies here.

Another issue is that seigniorage, which can be thought of as the interest saved by the Treasury from having currency that is non interest-bearing debt circulating as a medium of exchange. To the extent that electronic money replaces currency, there is a cost to the Treasury and to taxpayers. A study in the late 1990s by the Congressional Budget Office estimated that if electronic money were to replace 10 percent of the coin and currency denominations under 10 dollar, the government would lose about 370 million dollar per year. It is also estimated that the Treasury will lose

about 20 billion dollar per year if electronic money replaces physical notes and coins. Finally, there is the issue of the cost of operating a checking system. McAndrews and Roberds argue that the cost of relying on cheques is between 60 million dollar and 100 billion per year and that electronic payment would reduce this cost. Finally, although electronic money is not regulated in the United States, it is subject to regulation in the EU. The Euro system's requirements and objectives for electronic money are as follows:

1. Issuers are subject to prudential supervision.
2. Electronic money schemes must have solid and transparent legal arrangements.
3. Electronic money schemes must maintain adequate technical, organizational, and procedural safeguards to prevent, contain, and detect threats to security, particularly counterfeits.
4. Protection against criminal abuses must be taken into account in the design and implementation of electronic money schemes.
5. Electronic money schemes must supply the European Central Bank with whatever information it needs for purposes of monetary policy.
6. The European Central Bank may impose reserve requirements on all issuers of electronic money.

It is also desirable that electronic money schemes be interoperable and adopts an adequate guarantee, insurance, or loss-sharing plan. Interoperable means that the payments belonging to one payments system can be used in other systems.



#### **4.5 Development of Electronic Money with Technological Changes: -**

The internet was first innovated in the US military industrial complex. Due to various purpose of its design, the internet has given us a revolutionary new way to collect, organize and communicate information at the speed of light. Its origin in the late 1960s, as a government-funded effort linking computers in government agencies, university departments and research labs together, was that of a small-scale network for the circulation of data and other types of information within the scientific community. The introduction the World Wide Web and invention of the browser opened up cheap access to the internet for the masses, turning this medium during the first half of the 1990s into a huge chat club and information exchange. Given the low cost of setting up new websites, many firms soon realized that the internet would allow them to get in touch with a whole lot more consumers across the globe 24 hours per day, 7 days per week.

When the internet emerged, it offered investors new opportunities for capital gains on their stock holdings. To the extent that this medium promised a huge number of investment opportunities and efficiency gains, it boosted already high valuations of US corporations, especially those firms standing to benefit the most from the growth of e-commerce.

While initially gripping the world as a free, open-access medium facilitating communication and the circulation of information, investors preferred to focus on a different aspect of the internet. They got most excited about the web as a locus of commerce, viewing it as a revolutionary technology bound to transform corporate organization and marketplace alike. The concentration of financial and entrepreneurial

resources directed towards the internet made sure that e-commerce had the means for rapid expansion, driven forward by an explosion of ideas, applications and start-up companies.

When e-commerce began to emerge in 1996, its first wave of applications concerned Business-to- Consumer (B2C) transactions which took off with amazing speed. These early successes triggered an explosion of B2C-oriented online suppliers, as more and more firms specializing in consumer goods or services made it their primary concern to create attractive web to enjoy the fruits of co-branding, jointly organized sales-promotion schemes, centralized payment facilities and other advantages from belonging to a large network. Their rapid spread was taken as sign that B2C commerce had the potential of maturing rapidly into a viable alternative to traditional retail trade conducted in brick-and-mortar stores.

During the coming decade, large numbers of firms in the United States and elsewhere will move their buying of parts and components as well as their sales of excess inventories online. The advantages of internet-based markets in terms of ease, speed and cost are so overwhelming that we can expect a revolution in inventory management and sales techniques which will transform the relationships between producers and their suppliers as well as their customers. The internet allows anyone to get directly in touch with the product sought, and this is an irresistible attraction.

In retrospect, it was no surprise that e-commerce was launched with such amazing speed. Given the ease with which web sites could be set up and made fully functional, it took very little to make use of this technology provided you had the creative talent for strategy and design. Expert for those skills, the start up costs for new internet producers were quite low.

So were the product development costs, creating a permissive climate for fast-paced innovation. Someone with a useful idea could implement the innovation very rapidly, encouraging constant search for the next great idea that might make billions. In this intensely competitive and innovation-driven environment it seemed critical to be first, the first one to have the idea, to implement it, to make it the industry standard. The technological race unleashed on the internet compressed time.

Given the dynamic nature of e-commerce, centered at this point on merchant networks, electronic auction sites and global commodity exchanges, investors soon came to expect explosive growth in this domain of the New Economy. At the moment take-off, in 1998, knowledgeable sources, such as the internet consulting firm forester, estimated that this activity would rise rapidly to a phenomenal \$1.4 trillion by the end of 2003. Such a thirty-fold increase in e-commerce volume within just five years implied a major transformation in the way business is organized and consumers shop. It presumed that corporations would rapidly move their supply orders and wholesale distribution to the internet, that some goods and services such as books, airline tickets, financial services or education would get sold predominantly online, that online auctions would become a huge mass market for used or surplus products, and that the suppliers of internet technology and its infrastructure could maintain the phenomenally fast-paced expansion of this complex computer and communication network. It also presumed that consumers find buying on the internet practical, safe and convenient.

Intertwined with optimistic projections of e-commerce growth were efforts to expand the infrastructure of the internet and so accommodate the

anticipated increase in online traffic. A big battle has ensued between different systems of internet delivery over who will build the most effective infrastructure for broadband. A digital pipeline for networks carrying large amounts of voice, data and video services, broadband technology will increase speed and volume within the next decade: -

1. The existing PC-based system, with computers hooked up to telephone lines, will be vastly improved. Telecommunications firms all over the world are beginning to extend their fiber-optics networks to local phones. Once accomplished, they will replace existing modems with high speed Digital Subscriber Line (DSL) technology.
2. Broadband technology will also be delivered by cable-based networks offering fast internet connections, interactive television, video on demand, as well as phone computers, they will also spur access to the internet via 'smart' television sets.
3. Wireless technology will prove especially useful for the creation of a mobile web using cell phones as the primary access tool to the internet. Those cell phones will soon be a whole lot smarter and more convenient than today's versions. This is an area where the Europeans and Japanese have a clear comparative advantage over the Americans whose use of cell phones has been hampered so far by excessive market fragmentation. The mobility of access promised by wireless applications will be a very attractive feature and enable us to reach the internet whenever and wherever we want to.

Whether transmitted via fiber optics, cable or satellite, whether accessed by PC, interactive TV or cell phone, the internet will soon be reachable anywhere, anytime. When we log onto the internet, it will cost almost nothing and be nearly instantaneous no matter whether we do that at home, in the car, or on the street. Once online, we will have much more powerful software and versatile portals available with which to carry out our activities. Today, not even a decade into this phenomenon, the internet has emerged as the vector of a new technological revolution, one as far reaching as the invention of electricity at the turn of the last century.

**Internet as Payment Sphere:** -At the beginning of the internet's restructuring from a public good into a private commodity, arrived at the point where we can see the outlines of such an alternative emerge. Currently there are several experiments under way to introduce online monies which are created and circulated on the internet in the course of e-commerce transactions. This new type of Electronic Money, termed here 'Cyber Cash' comes in different variants, depending on the type of e-commerce it is supposed to serve. Some experiments, such as those involving the design of e-checks, aim to establish a general cybercash system that can be used anywhere online. But much of the monetary innovation pertaining to cybercash now has a narrower focus on specific e-commerce applications. For instance, e-mail money has already proven very attractive for Peer to Peer (P2P) transactions. Smart cards might one day help to revolutionize B2C transactions. That same segment of e-commerce has also seen efforts in the direction of coupon money as the dominant form of cyber cash used in electronic shopping malls. Online money for B2B transactions will perhaps develop more slowly, since businesses already use highly automated fund-transfer mechanisms for

transactions with each other. But even here we can see the first efforts to create genuine cyber cash variants tailored to e-marketplaces or to typical e-business transactions, such as supply chain management.

To the extent that the future success of the internet as an engine of economic growth depends on its restructuring from an open-access medium of communication into a restricted-access supplier of paid services, online money would surely help that transformation along while at the same time also completing the transition to electronic money. In the process debit cards and credit cards will be replaced by smart cards which can be inserted into the access tools of the internet. Electronic fund transfers will move beyond wholesale (B2B) transactions to retail (B2C and P2P) transactions and so become the primary mechanism for moving money around. Net-based payments systems, using digital cash, will become part of sophisticated online shopping protocols which in turn will facilitate the rapid growth of e-commerce. Banking will increasingly move online, as will the trading of securities in the financial markets. The internet might evolve gradually into the primary locus of money creation and credit extension, whereby it pushes its impact on our economy beyond commerce to production and finance. We have arrived at the threshold of a new era in which online money reshapes the modus operandi of our 21<sup>st</sup>-century economy.

#### **4.6 Changing Scenario in Banking Sector in India: -**

The major participants of the Indian financial system are the commercial banks, the financial institutions, encompassing term-lending institutions, investment institutions, specialized financial institutions and the state level

development banks, Non-bank Financial Companies and other market intermediaries such as the stock brokers and money-lenders. The commercial banks and certain variants of NBFCs are among the oldest of the market participants. The FIs, on the other hand, are relatively new entities in the financial market place. In the last five decades, trends in the banking sector were very wide.

Bank of Hindustan, set up in 1870, was the earliest Indian bank. Banking in India on modern lines started with the establishment of three presidency banks under Presidency Bank's act 1876 i.e. Bank of Calcutta, Bank of Bombay and Bank of Madras. In 1921, all presidency banks were amalgamated to Imperial Bank of India. Imperial bank carried out limited central banking functions also prior to establishment of RBI. It engaged in all types of commercial banking business except dealing in foreign exchange.

Reserve Bank of India Act was passed in 1934 & Reserve Bank of India (RBI) was constituted as an apex bank without major government ownership. Banking Regulations Act was passed in 1949. This regulation brought Reserve Bank of India under government control. Under the act, RBI got wide ranging powers for supervision & control of Banks. The Act also vested licensing powers & the authority to conduct inspections in RBI.

In 1955, RBI acquired control of the Imperial Bank of India, which was renamed as State Bank of India. In 1959, SBI took over control of eight private banks floated in the east, while princely states making them as its 100% subsidiaries.

RBI was empowered in 1960, to force compulsory merger of weak banks with the strong ones. The total number of banks was reduced from 566 in 1951 to 85 in 1969. In July 1969, government nationalized 14 banks having deposits of Rs.50 crores & above. In 1980, government acquired 6 more banks with deposits of more than Rs.200 crores. Nationalization of banks was to make them play the role of catalytic agents for economic growth. The Narsimham Committee report suggested wide ranging reforms for the banking sector in 1992 to introduce internally accepted banking practices. The amendment of 1993 saw as the entry of new private sector banks.

Functioning of a bank is a difficult task. Since banking involves dealing directly with money, governments in most countries regulate this sector stringently. In India, the regulation traditionally has been very strict and in the opinion of certain quarters, responsible for the present condition of banks, where NPAs are of a very high order. The process of financial reforms, which started in 1991 has, cleared the cobwebs some what but a lot remains to be done. The multiplicity of policy and regulation that a Bank has to work with makes its operations even more complicated, sometimes bordering on illogical. This section, which is also intended for banking professional, attempts to give an overview of the functions in as simple manner as possible. Banking Regulation Act of India, 1949 defines Banking as, "accepting, for the purpose of lending or investment of deposits of money from the public, repayable on demand or otherwise and withdrawals by cheques, draft, order or otherwise."

**Banking Services through E-Banking:** - In recent years, there has been a big change in Indian banking strategies with more focus on quality,



efficient services and profitability. The first change along this line was brought in by the foreign banks with their emphasis on high quality and efficient service. These were combined with the technological changes like satellite banking and Tele-banking manned by skeletal staff and lesser number of branches. Technology innovation and intense competition among existing banks have made banks to rethink about the way by which they operated their business.

The importance sophisticated or high technology for improving customer service, productivity customer service, productivity and operational efficiency of banks is well recognized. This enabled a wide range of banking products and services, being made available to retail and wholesale customers through an electronic distribution channel. As a part of their action plans, banks in India are now continuously focusing on technology up gradation with a customer centric approach. To realize this, the banks have recently tied up with various software companies and with premier technological institutes like IITs, who can offer their best expertise consultancy services to the banks in applying the right kind of technology in the right place so as to benefit the customers.

The advent of Automated Teller Machines (ATM) has long extended banking into the realm assisted computer of network-enabled services. The banks are providing the customers 24\*365 kinds of cash withdrawal facilities from any ATM across the country. Technology in the form of electronic banking has made it possible to find alternate banking practices at lower costs. E-banking has been setup exclusively to serve clients through a network, providing customers with the full range of banking services such as deposits, withdrawals, funds transfer, loans and other

forms of transactions. It is worth mentioning the words of Bill Gates "We need banking, do we really need banks?".

#### **4.7 Evolution and Concept of Electronic Banking: -**

In its evolutionary history, a start had been made in electronic banking as early as the 1920s. But this technology or this form of banking did not get a widespread acceptance till the 1960s. It required almost a complete generation before this form of banking found popularity with a sizable group of Consumers and Bankers.

The effectiveness of Electronic Banking System was inhibited by three main factors: -

1. Communication Technology was infancy and was inadequate for local or global coverage.
2. Most Companies and banks had incompatible systems sometimes even different branches of the same bank had different systems.
3. Computer manufactures were unable to agree on the development of technology standards which would permit data exchange directly between computer systems.

After 1960, electronic banking and its use recorded a quantum jump. In the year 1991 this form of banking took a great leap by which home, office and telephone banking were made more effective and efficient as a means of selling and delivering products. At the same time, the rapidly rising costs of operating a physical branch network particularly in terms of staff and premises, are making the traditional channel less attractive.

E-banking implies provision of banking services through electronic delivery channels. The e-banking may be defined as “the use of electronic channels to communicate and transact business with both domestic and international customers, primarily through use of the internet and the World Wide Web.” This has enabled banks and other financial institutions to increase the use of electronic channels for receipt and delivery of their products and services. E-banking has been around for quite some time in the form of Automated Teller Machines (ATMs) and telephone transactions. In more recent times, it has been transformed by the internet- a new delivery channel that has facilitated banking transactions for both customers and banks.

In India electronic banking is of fairly recent origin. The traditional model for growth has been through branch banking. In 1990s the non-branch banking services have been started. The new private sector banks are handicapped by the lack of a strong branch network in comparison with the public sector banks. In the absence of such networks, the market-place has seen the emergence of a lot of innovative services by these players through direct distribution strategies of non-branch delivery. All these banks are using home banking as a key pull factor to remove customers away from the well-entrenched Public Sector Banks.

**Salient Features of E-banking: -**

1. “24 Hour banking” service, “7 days a week”.
2. Electronic Funds Transfer System (EFTS).
3. Magnetic Ink Character Recognition (MICR).
4. Cheques Truncation Technology (CTT).
5. Personal Computer Power (PCP).

6. The Interactive Voice Response Systems (IVRS).
7. Insurance products, share dealing.
8. Shopping products like credit sales, direct debits, televised retail sales.
9. Development of plastic cards.

**Uses of Technology in the Banking Sector:** - The following are the four ways that the banking sector has used technology, they are: -

1. For effective handing of greatly expanded customer base.
2. To trim down considerably the real cost of handling payments.
3. To release the banks from the traditional constraints on time and place; and
4. To bring in new products and services.

**Factors Determining the Growth of E-Banking:** - The momentum of e-banking has picked-up considerably for the following reasons:

**(1)- New Distribution Channels:** - Financial Institutions now have a variety of technological means to initiate on-line banking programs without incurring the heavy capital investments and needed to develop their own system.

**(2)-No Entry Barriers:** - Technology is creating a common field where fast-moving non-banking firms can easily provide banking products. This trend can be seen in the area of bill payments, where recent innovations have provided an opportunity for non-banks to break into the banking business, threatening one of the most profitable existing services provided by banks.

**(3)-Changing Customers Expectations:** -New technology has not only enabled an ever-increasing range of products, but also far-reaching effects on consumer expectations. Banks have identified that there is a need to be more flexible by separating the distribution channel to meet consumer expectations.

**(4)-Digital Convergence of Financial Management Transactions:** - Technology has enabled a convergence of a broad range of financial management activities that previously were considered disparate. There is software that makes it possible to perform diverse transactions such as, credit card, brokerage, and mutual fund statements to be downloaded, and funds transfer for recurring payments is made possible through one common interface.

**The Catalyst in Initiating Electronic-Based Delivery System:** -

**(1)-Credit Cards:** - Credit Cards have found wide spread acceptance in the metros and big cities. Credit Cards are gaining popularity for online payments. Credit card transactions result in immediate overnight payments. This rapid payment can reduce the merchant's requirements for financing Inventory.

**(2)-Debit Card:** - Debit Cards have also started becoming popular in the last two years only with Master Card and Visa tying up with Indian and Foreign Banks.

**(3)-Tele-Banking:** - Tele-Banking is available with Foreign and Private Sector Banks, offering the service through the technology called Interactive Voice Response Service (IVRS). It has moved into the domain

of Mobile Phones as well as the services that are being marketed as Mobile Commerce (M-commerce).

**(4)-ATM:** - ATM trades the first appearance in the early 1990s started by Citi Bank, and Hongkong Bank. By the end of 1990 even Indian Private Banks and Public Sector Banks have come up with their own ATM networks. Under the initiative of the Indian Bank Association (IBA) in Mumbai, a Pilot Project to link up 165 ATMs of 31 Member Banks has come up in the form of 'SWADHAN'- a shared payment network system which has a card base of 1, 00,000 with 30,000 transactions per month. Master Card and Visa are also following suit to offer Shared ATM Network.

**(5)-Internet Banking:** - Internet banking is now being offered by some selected banks. This seems to be the latest growth area of banking.

**(6)- Indian Private Sector Banks:** - In the 1990s the Private Sector Banks have been aggressively following a mixed approach for enhancing their reach. They have no restrictions in opening branches. This explains the reason why Times Bank, Centurion Bank, Global Trust Bank and HDFC Bank have been setting up new branches at a fast pace. Very recently HDFC Bank and Times Bank have merged and created India's largest private bank under the umbrella of HDFC bank. These branches are very small and operate as Front Office Sales only. No backroom accounting or processing activity happens here. Backrooms of these branches are centralized in regional locations, and serve multiple branches. Therefore, the approach of these private banks has been the best mixture of ATM-driven electronic banking and sales and service driven branches as Distribution Points.

**(7)-Indian Public Sector Banks:** - Despite the compelling business air for restructuring their distribution channels, the public sector banks have not given too much priority to non-branch delivery. Also, the customer profile for the public sector banks is probably not the right fit for Electronic Banking Services, because of their social obligations to provide banking services for the masses. Electronic banking products require a certain sophistication that may prove to be a hurdle on the way of smooth absorption of the technology by the client-profile of the public sector banks. Therefore, there is no much focus on electronic banking services here, even though expectations are State Bank of India, who has aggressively pushed their credit cards. Bank of Baroda has credit card brand of its own called the BOB card which is India's one and only proprietary card. SBI has tied up with multinational GE Capital to prove it VISA credit cards. It has already, become the second highest issuer of credit card in India three years.

Many of the other banks like Allahabad Bank, Vijaya Bank, Central Bank, Canara Bank, Andhra Bank etc. have issued credit cards as well, in collaboration with either Visa or MasterCard. Some of these banks also have ATMs which are mostly attached to their branches and can be used by customers of that particular branch only. Though they have a plan of networking in future, it becomes evident while talking to their personnel that this is not a key area of focus yet.

**Products of Electronic-Banking:** - Technology has always been one of the key thrust areas for the banks. The banks have already marked a significant progress on the technological front. During the past few years the banks have under taken a swing of IT initiatives including branch

computerization of all controlling offices. With the introduction of the internet, the new products and services are emerging. The following are the few electronic banking products: -

**(1)-Automated Teller Machines (ATM):** -It is a machine permitting a bank's customers to make cash withdrawals and check their account balances at any time any where and without the need for a human teller. Many ATMs also allow people to deposit cash or cheques, transfer money between their bank accounts. The main purpose of the introduction of ATMs is to allow customers to draw cash at any time and to provide services where it would not have been viable to open another branch.

ATMs are known by a wide variety of names, some of which being more common in certain countries than others. Some examples are ATM, Automated Banking Machine, ATM Machine, and Hole-in-the-wall, Cash Dispenser, Cash Machine, Robotic Teller etc.

**(2)-Banker's Automated Clearing System (BACS):** - Using BACS a large number of payments can be transferred directly into appropriate account across a number of banks and in one payment, covering the whole amount, which is paid out of client's own account. Through the use of this system banks can provide service at a cheaper rate than normal processing rates. BACS payments are popular for paying staff-wages are transferred direct from the business bank account to the employee's bank accounts in fact; it is the most common way for an employee to be paid.

**(3)-Tele Banking Services:** - It is a service for customers doing banking transactions via the telephone. This facility is available with the help of a Voice Response System (VRS). With the Tele-banking service, customers dial a designated service number, listen to the synthesized voice of an



operator, follow the steps announced by the voice, and can conveniently perform many common tasks such as balance inquiry, account transfer, and password change. Customers can perform a number of transactions from the convenience of their own home or office, if they have phone connection. Currently, services offered by Tele-banking include: -

1. Check account balance.
2. Check the most recent unlogged transaction.
3. Get the current interest rate for RMB as well as foreign currencies.
4. Change account password.
5. Report the loss of account certificate.
6. Transfer funds between accounts.

**(4)-Cash Management Services:** - Managing a growing business is difficult. Managing the cash resources is also difficult. Banks offer a number of sophisticated services to larger clients to help them to manage their funds world wide. Such clients will have many subsidiaries around the world, each with their own bank account held in local currencies. In such cases the treasury department or holding company frequently acts as a banker to the group covering overdrafts in one country by transfers from another company's account.

**(5)-Electronic Funds Transfer (EFT):** - EFT is defined as, "any transfer of funds initiated through an electronic terminal, telephonic instrument, or computer or magnetic tape so as to order, instruct or authorize a financial institution to debit or credit an account." In other words, any transfer of funds between parties or depository institutions via electronic data systems without the use of a cheque or draft. It utilizes computer and telecommunication components both to supply and to transfer money or

financial assets. Transfer is information-based and intangible. It facilitates the quick movement of deposit money from one bank to another bank. It reduces administrative costs, delays and errors. It is also known as computer-to-computer cash payments.

**(6)-Electronic Data Interchange (EDI):** - EDI is the exchange of documents in standardized electronic form, between organizations, in an automated manner, directly from a computer application in one organization to an application of another. It was earlier used in U.S. It offers easy prospect and cheap communication of structured information throughout the corporate community.

**(7)-Electronic Cheque System:** - In this electronic cheque system, consumers process an electronic chequebook on a Personal Computer Memory Card International Association (PCMCIA) card. As needed, cheques are written electronically from the e-cheque book on the card. They are sent over the Internet to the retailer who in turns sends the e-cheques to the customer's bank. Settlement is made through a financial network such as an ACH. In addition to payment data, commercial data such as invoice number and data of receipt can be enumerated, there by achieving a higher degree of efficiency by eliminating duplication.

**(8)-Cheques Handling:** -All cheques are marked with magnetic ink character to be sorted at high speed. Local cheques i.e. those affecting only one branch may be processed and the input transferred to the main computer using the branch terminal.

**(9)-Cyber Cash:** - The idea behind finding the Cyber cash service is to provide an accessible payment system for the internet. Cyber cash offers a

secure medium to deliver payments between customers, merchants and banks. It offers safe, efficient and inexpensive delivery of payments across the internet.

**(10)-Credit Card:** - A credit card is a payment card issued to a person for purchasing goods and services and obtaining cash against a line of credit established by the issuer, for which a cardholder is subsequently billed by an issuer for repayment of the credit extended at once or on an installment basis. The first real credit card issued in 1951 by Franklin National Bank in New York.

**(11)- Debit Card:** - This plastic card looks like a credit card, but it is used to withdrawal money from a savings or checking account. When the debit card is used at ATMs or in stores to make purchases, money is immediately deducted from the account. The money can not be withdrawal more than the amount in the account.

**(12)-Smart cards:** - In the early 1990s, a payment system for low value amounts using smart card was first introduced in Europe. A card that is often the same size as a credit card but with a tiny built- in microprocessor or computer chip and memory used for identification or financial transactions. When the card is inserted into a reader, it transfers data to central computer. It is more secure than a magnetic stripe card and can be programmed to self-destruction if the wrong password is entered. A smart card can be used to store personal identification, medical history and insurance information and to store thousands bits of information but it requires a special card-reading device.

#### **4.8 Branchless Banking-A New Dimension of Financial Inclusion: -**

In a many countries, bank and other commercial service providers are finding new ways to make money delivering financial services to unbanked people. Rather than using bank branches and their own field officers, they offer banking and payment service through postal and retail outlets, including grocery stores, pharmacies, seed and fertilizer retailers, and gas stations among others. For poor people “Branchless Banking” through retail agents may be for more convenient and efficient than going to bank branch.

Branchless Banking (BB) represents a significantly cheaper alternative to conventional branch-based banking that allows financial institution and other commercial actors to offer financial services outside traditional bank premises by using delivery channels like retail agents, mobile phone etc. BB can be used to substantially increase the financial services outreach to the un-banked communities.

Provision of enabling regulatory environment by careful risk-reward balancing is necessary to use such models. However, as financial institution can not take on BB without the help of other market players like telecom companies, technology service providers agents etc.

**Chore of Branchless Banking:** - Following product and services may offer by branchless banking:

1. **Opening and maintaining a BB account:** - A BB account is an account opened and operated by a customer with a bank. Banks may associate such account to a particular branch or to a centralized branchless banking unit. Account capabilities / limits

are commensurate with the level of Customer Due Diligence (CDD) and KYC procedures the customer has undergone.

2. **Account-to-Account Fund Transfer**:-Customer may transfer their fund to/ from registered accounts current/saving bank account, loan limit account, credit card accounts etc.
3. **Person to Person Fund Transfer**:- Customers may transfer funds to/from their BB account to BB or regular accounts of other customers of same or some other customers of same or some other bank (depending on the model capabilities).
4. **Cash-in and Cash-out**: -Customer may deposit to/from their BB account using a variety of options including bank-branch counters ATM machines and an authorized agent locations.
5. **Bill Payments**: -A BB account can also be used to pay utility bills (e.g. Gas, Electricity, Phone etc.)
6. **Merchant Payments**: -Customer can use a BB account to make payments for purchase goods and/or services.
7. **Loss Disbursement/ Repayment**:-Financial Institutions particularly MFBs may use BB account as a means to disburse small loan amount to their borrowers have BB accounts. The same account may be used to customers to repay their loan installments.

**Models of Branchless Banking**: -There are two models of branchless banking through which retail agents are emerging: one led by banks, the other by non-bank commercial actors. Both use information and communication technologies, such as cell phone, debit and prepaid cards, and card readers to transmit transaction details from the retail agent or customer to the bank.

**The Bank-Led Model:** - In the most basic version of the bank-led model of branchless banking, a licensed financial institution (typically a bank) delivers financial services through a retail agent. The bank develops financial products and services and distributes its through retail agents who handle the customer interaction. The bank is the ultimate provider of financial services and is the institution in which customers maintain accounts.

Retail agents have face-to-face interaction with customers and perform cash-in/ cash-out functions, much as a branch-based teller would take deposits and process withdrawals. Virtually any outlet that handles cash and is located near customers could potentially service as a retail agent. Whatever the establishment, each retail agent is outfitted to communicate electronically with the bank for which it is working. The equipment may be a mobile phone or an electronic Point-of-Sale (POS) terminal that reads cards.

**Table 4.1 The Bank-Led Model**

Customer	Retail Agent	Bank
<b>Step-1:</b> Customer requests financial service.	<b>Step-2:</b> Retail agent checks customer's ID and processes transaction, either directly through bank's infrastructure (POS) or through payment processing agent.	<b>Step-3:</b> Bank credits and debits bank accounts of customer and other party to the transaction.
<b>Examples of Services offered:</b> Deposits and withdrawals; money transfers; loan/bill/ tax payments; loan application and disbursement; account opening and credit card application acceptance.	<b>Examples of Retail Agents:</b> Retail outlets (grocery stores, lottery outlets, pharmacies, etc); socially motivated organizations (NGOs, MFIs, etc); post offices.	<b>Examples of other Parties:</b> Includes retail agent (for deposits or withdrawals) and recipients of money transfers (other customers, utility companies, tax authorities, etc.).

Once an account is established or loan approved, the customer goes to the retail agent to conduct all or certain financial transactions. The retail agent checks the customer's identification documentation and processes the transaction, debiting the customer's and crediting the payee's bank account if it is a purchase or a transfer of funds between accounts. Unless the transaction is merely a transfer of funds, cash is either deposited to or withdrawn from the retail agent's cash drawer. An electronic record of the transaction is either routed directly from the retail agent to the bank or is handled by a payment processing agent that settles the transaction between the customer's account and the payee's account.

**The Nonbank-Led Model:** - In the typical nonbank-led model of branchless banking, neither customers deal with a bank nor maintain a bank account. A bank may not be involved at all. Instead, customers deal with a nonbank firm-either a mobile network operator or prepaid card issuer-and retail agents serve as the point of customer contact. Rather than deposit money from a bank account, customers exchange their cash for e-money stored in a virtual e-money account on the nonbank's server, which is not linked to a bank account in the individual's name.

E-Money, according to the Basel Committee's definition, is "a stored value or prepaid product in which a record of the funds or value available to the consumer for multipurpose use is store on an electronic device in the consumer's possession" (Bank for International Settlements, 2004). In other words, customers exchange cash for value stored in a card or mobile phone-based virtual account. Customer can send this e-money to others, use it to make purchases, or use the e-money account to store funds for

future use. They can also convert it back to cash at any participating retail agent.

**Table 4.2 The Nonbank-Led Model**

Customer	Retail Agent	Bank
<b>Step-1:</b> Customer requests sale or financial services using either cell phone or smart card.	<b>Step-2:</b> Retail agent checks customer's ID and processes transaction on behalf of nonbank, using either cell phone or smart card reader.	<b>Step-3:</b> Nonbank registers transaction, updates the (virtual) E-money accounts belonging to the customers and the other party to the transaction. Nonbank manages individual customer accounts.
<b>Examples of Services offered:</b> Deposits to and withdrawals from customer's E-money account (cash-in and cash-out); items purchases; money transfers; loan disbursement/repayment; bill/tax payments.	<b>Examples of Retail Agents:</b> Airtime vendors' department stores; supermarkets; other commercial enterprises.	<b>Examples of other Parties:</b> Includes retail agent (for deposits or withdrawals, or item purchases); recipients of money transfers (other customers, utility companies, tax authorities, etc.).

**Responsibility:** - The ultimate responsibility for branchless banking lies with the financial institution. Financial institution may take necessary steps to safeguard against liabilities arising out of the actions of its agents, service providers or partners. Within the financial institution, board of directors is responsible for strategic decisions, senior management for effective oversight and compliance and audit functions for ensuring soundness of internal controls and adherence to operational guidelines.

**Agents-Assisted Banking:** - The true power of branchless banking cannot be unleashed until some trusted third parties are not involved in performing some of the activities that are traditionally performed in bank branches by bank staff.



**Role of Agents:** - Agents may perform any or all of the following functions depending on the agency agreement.

1. Opening of branchless banking accounts.
2. Cash in/ cash out.
3. Bills payments (both from registered branchless banking customers as well as from walk-in customers of any utility company).
4. Loan disbursement/ repayment collection (with involving into loan marketing/ approval functions).

Bank may organize their agent network using open architecture so that they may entertain other banks customers using infrastructure. All charges have to be pre-agreed between the bank and agent and should be clearly communicated to the customers.

**Types of Agent:** - Agent may be following types-

1. **Super Agent:** -These may be organizations having well established owned setup. These will be responsible for managing and controlling subagents.
2. **Direct Agent:** -These may include large to medium sized stores etc which have a separate agency/ service level agreement with the financial institution.
3. **Sub Agent:** - These are the branches/ outlets or agents not directly controlled by the financial institution on a day-to-day basis. These will be managed by a super agent. However, these must have a similar service agreement with the super agent.

**REFERENCE:**

1. Anitha S, (October, 2008), "Credit Cards Frauds and Precautions." Professional Banker, The ICFAI University Press, Hyderabad, India, volume 8(10) pp37-39.
2. Arumugasamy S. and Shenbagavalli P., (May, 2008), "Growth and Development of ATM." Banking Finance, Kolkata, India, volume 21 (5) pp12-14&20.
3. Azhagaiah R. and Egilarasi L., (January, 2004), "Credits Cards and Spending Pattern." Banking Finance, Kolkata, India, volume 17(1) pp15-17.
4. Bhavani R and Prakash V, (October, 2008), "On Line Banking." Professional Banker, The ICFAI University Press, Hyderabad, India, volume 8(10) pp50-53.
5. Dhade Aruna and Mittal Manish, (May 2008), "Preference, Satisfaction Level and Chances of Shifting: A Study of the Customer of Public Sector and New Private Sector Banks." The ICFAI Journal of Bank Management, volume 7(2), pp62-68.
6. Dudija V.D., (2006), "Retail Business" Commonwealth Publishers, Delhi, India.
7. Deva Vasu, (2003), "E-Services" Commonwealth Publishers, Delhi, India.
8. Farooqi S., Ahmed S. A., (November, 2008), "Branchless Banking-A New Dimension of Financial Inclusion." Banking Finance, Kolkata, India, volume 21 (11) pp16-21.
9. Gupta S.L. and Mittal Arun, (October, 2008), "Mobile Banking Present Status and Future Perspectives." Chartered Financial Analyst: Indian Banking 2007-08, The ICFAI University Press, Hyderabad, India, volume 14 (10) pp98-100.

10. Gupta Sumeet, (July 2008), "A Study of Customers Perception towards E-Banking with Special Reference to Jaipur City." Professional Banker, The ICFAI University Press, Hyderabad, India, volume 8(6), pp 66-74.
11. Geetika, Tanuj Nandan and Ashwani Kumar Upadhyay, (May 2008), "Internet Banking in India." The ICFAI Journal of Bank Management, Hyderabad, India, volume 7(2), pp47-60.
12. Goel Ritendra, (2007), "E-Commerce" New Age publications New Delhi, India.
13. Krishnamurthy Mallikarjunan, (June, 2008), "Product Innovation in Banking Industry." Professional Banker, The ICFAI University Press, Hyderabad, India, Volume 8(6), pp51-54.
14. Kumar Narendra, Anjana and Kavita, (June, 2006), "E-CRM in Banks." Banking Finance, Kolkata, India, volume 19(6) pp10-12&15.
15. Kumar Narender and Kumar Mohan, (February 2005), "Bank Computerization in India." Banking Finance, Kolkata, India, volume 18(2) pp12.
16. Manoharan B. (May, 2007), "Role of Debit Cards and Credit Cards in Indian Banking Industry." Banking Finance, Kolkata, India, volume 20 (5) pp13-14.
17. Narasaiah P. and Murthy Sudarsana, (October, 2006), "E-Banking, Challenges Ahead." Banking Finance, Kolkata, India, volume 19(10) pp7-10.
18. Patnaik U.C. & Chhatoi Basudev, "Bank Marketing" Sonali Publications, New Delhi, India, 2006.

19. Prasad V Alakh and Bhatnagar S.D, (September, 2005), "Security Issues in Electronic Commerce." Banking Finance, Kolkata, India, volume 18(9) pp24-30.
20. Ravi R. A., (May 2008), "User Perception of Retail Banking Services: A Comparative Study of Public and Private Sector Banks." The ICFAI Journal of Bank Management, Hyderabad, India, volume 7(2), pp32-42.
21. Radha Krishna, (February 2008), "The Role of Six Sigma in Banking" Professional Banker, The ICFAI University Press, Hyderabad, India, volume 8(2) pp. 37-40.
22. Reddy S.V, Reddy T. Jayarami and Sakunthala B, (November 2007), "Profitability and Productivity in Indian Public Sector Banks." Banking Finance, Kolkata, India, volume 20(11) pp13-15.
23. Rathankar G. and Veeraiah P., (November, 2006), "Changing Scenario in Banking Sector in India." Banking Finance, Kolkata, India, volume 19 (11) pp13-18.
24. Reddy Raghunatha S. and Reddy Sudarsana G., (January 2005), "Banking Services Through E-Banking." Banking Finance, Kolkata, India, volume 18(1) pp13-17.
25. Reddy B. Ramchandra, (May, 2004), "Some Aspects of E-Banking." Banking Finance, Kolkata, India, volume 17(5) pp17-19.
26. Singh Sultan, (August, 2008), "A Study of the Quality of Services Provided to SSI (Small Scale Industries) Customers by Public Sector Banks." The ICFAI Journal of Management, The ICFAI University Press, Hyderabad, India, volume 7(3) pp71-72.

27. Srivastava Ashish, (February 2008), "Payment and Settlement Systems in India." Professional Banker, The ICAI University Press, Hyderabad, India, volume 8(2) pp. 17-24.
28. Sivaloganathan K, (December 2004), "Payment via Electronic Media: A Competitive Advantage to Banking Industry." Banking Finance, Kolkata, India, volume 17(12) pp14-15&23.
29. Thiagarian T.S., (April 2008), "Training needs of the Banking Personnel" Banking Finance, Kolkata, India, volume 21(4) pp13-15.
30. Vinayagamoorthy A., (February, 2008), "Globalization and Recent Trends in Banking." Banking Finance, Kolkata, India, volume 21 (2) pp9-14.

## *Chapter 5*

# **Impact of Electronic Money on Consumer Behavior**

---

## **Impact of Electronic Money on Consumer Behavior**

**5.1 Introduction:** -The introduction of Electronic Money marked a milestone in the historical development of the services of E-banking and accommodates its dynamic growth much more effectively. This advantage becomes especially evident when looking at the conditions of its general acceptability. Rather than deriving its status as money from its intrinsic value as a commodity, credit-money involves pieces of paper with promises to pay which a third party, a bank, will comply with as an order. The public accepts these promises, because it trusts the banks to honour them. If any commercial bank ever reneges on the promise and fails to pay, then it will be the central bank which assumes that responsibility.

This triangular arrangement, where a payment obligation of buyer to seller becomes a debt relation between their respective banks settled by the central bank or any other clearing-house arrangement, has made money more trustworthy than it was when still represented by a commodity. With a few exceptional situations of hyperinflation ravaging a nation's economy, the public has come to trust bank checks and central bank notes to such an extent that their presumed validity is taken for granted. Of course, money works best when anchored in automatically. It is precisely when we do not have to ask ourselves where money comes from, how it circulates and who guarantees it that it has a chance to operate smoothly.

The moment we are forced to wonder about these questions because of unforeseen circumstances, our confidence in whatever money form is currently prevailing will erode without that public trust no money can function effectively. Of course, history is replete with examples where monetary instability or financial crises undermined this presumed automatically or where a degraded money form had to be replaced by a better alternative. The many instances of monetary instability are an indication that the insertion of money into our cash-flow economy is perhaps more problematic and less automatic than we presume. This is indeed the case. When analyzing money as a social institution, we are inevitably struck by two different aspects of money which may be incompatible with each other. On the one hand, money serves as a public good in as much as it's proper functioning- in terms of the modalities of its creation, its smooth circulation and its stable valuation-yields such large social benefits that you would not want anyone to be deprived of those. It is precisely this quality of money as a public good benefiting us all which justifies the public trust and consensus of general acceptability vested in it. On the other hand, money may also contain elements of a private commodity to the extent that it gets created by agents seeking to benefit contradictory to the extent that the private commodity aspects of engender consequences which undermine the public-good qualities of money. There are at least three such troubling consequences rooted in the private-commodity nature of money: -

1. If some market agents were empowered to create money and thereby were in a position to finance their spending with new money, they would gain a decisive advantage over all those market agents unable to do same. Today we have resolved this equal-



access problem by locating the creation of money outside the marketplace, in the banking system. Banks issue mere tokens and then transfer those via credit to borrowers in whose hands the tokens become money as soon as the loan gets spent on goods, services, or assets. We still have a financial-exclusion problem violating the equal-access requirement of money as a public good. Banks continue to deny credit to many businesses considered less creditworthy, particularly the smaller and newer ones, while also depriving the poor of access to checking accounts.

2. Another destabilizing consequence of money's private-commodity dimension is the tendency for banks to overextend credit during boom periods in pursuit of greater income and then cut back lending sharply amidst the first troubling signs of over extension, such as in response to sudden defaults. This boom-bust pattern of bank lending gives rise to a markedly pro-cyclical money supply which reinforces the business cycle dynamic of ups and downs in our economy. Moreover, the propensity of credit over extension engenders recurrent financial crises which, if left unchecked, have the potential for serious disruption of economic activity.
3. Finally, the private-commodity aspect of money also manifests itself in the fact that in the hands of private issuers, competing with each other for market share and motivated by profit, money itself becomes an object of innovation and product development. Modern money is essentially a matter of contractual arrangements by banks on the liability side and asset side. Monetary innovation mostly involves changes in those contractual arrangements and is

therefore implemented much more easily than innovation in industry aimed at altering tangible products or developing new ones from scratch. Compared to industrial research and development, monetary innovation involves few sunk costs and is less confined by physical limits. Such activity aims not only to lower transaction costs and facilitate exchange, sine qua non conditions for public acceptance without which no monetary innovation can succeed, but also to increase the money-creating capacity of banks seeking to earn more income this way.

To the extent that these private-commodity dimensions of money all threaten its public-goods quality, they have to be kept in check. Otherwise money does not operate efficiency and undermines the stability of the economy. For centuries the dualistic nature of money was managed by its linkage to precious metals which regulated the supply of money and its insertion into the economy. After 1931 the ruthless discipline of gold gave way to a more flexible management of money by the State as the only non market agent capable of counteracting market forces. The State's monetary authority, typically a central bank, was authorized to manage money's public-good quality with a combination of monetary-policy tools regulations designed to affect the structure and behavior of banks, lender-of-last-resort mechanisms to counteract financial crises and international monetary arrangements which guide the participation of the national economy in the world economy.

Credit-money is the form of paper tokens, surely one of the great achievements of the new deal, is now being gradually transformed into electronic money. In the 1980s, banks began to experiment with emerging

computer and communication technologies to benefit from the technological revolution under way. Computerized payments systems, run by consortia of commercial banks, could move money transfers beyond the reach of central banks and so undermine their control over the monetary process. Large-volume transfers between businesses were automated through a network of bank-operated Automated Clearing-Houses and Electronic Fund Transfer technology. The banks also tried to push the electronic revolution into retail banking by getting households accustomed to using automated teller machines, paying with plastic cards and conducting their banking transactions at home on the computer.

The accelerating efforts by to develop electronic alternatives to paper money are not just motivated by the desire to take advantage of technological progress. They are also caused by the steady erosion of the post war regime of state-administered credit-money. Electronic money will soon experience an important push forward through its applications on the internet. E-commerce on the internet drives electronic money towards cyberscash. This imminent development in the history of money will give us an entirely new type of money, one even more immaterial than paper. Its intangibility as something existing only virtually, as a flow of data over computer networks, will shift the emphasis of public trust from confidence in banks as third party intermediaries making good on the promise to pay to the technology of fund transfers and non bank players getting involved in the monetary process.

**5.2 E-CRM in Banks:** - "A customer is the most important visitor in our premises. He is not dependent on us. We are dependent on him. He is not an interruption in our work. He is the purpose of it. He is a part of it. We

are not doing him a favour by serving him; he is doing us a favour by giving us an opportunity to do so." These words of Mahatma Gandhi indicate his vision of customer service. These words become more important in a service organization like banks.

Gone are the days when bankers could afford to sit back and wait for business to come to their door-steps. Today the banker is required to go and knock at the door of customer for getting good business on its existing or current and prospective customer. Therefore, in order to retain existing customers and acquire new customers it is better for the banks to maintain good long-term relationship with its customers. This can be done if the bank understands the needs, wants of its customers, and then provide them better services. Therefore, whether a bank is going to succeed or fail, its trade area is determined largely by how well the needs of its customers have been understood and satisfied. Therefore, it is rightly said by Peter Drucker, "The customer defines the business. To satisfy the customer is the mission and purpose of every business."

E- CRM is the marketing concept. Marketing in terms of banking can be defined as the creation and delivery of consumer satisfying products at a profit to a bank. The new marketing concept revolves around consumer satisfaction. Every business wants to grow day by day. It wants to attain a growth, which knows no ends. It must continue to try to attract customers at all times during its lifetime without a single day's pause.

If the marketing concept is applied to a bank, it would mean that the bank should continue to create and deliver the existing services to consumers most effectively, and banks marketing must be consumer oriented. It is

critical that the product or the services the bank offers fulfill customer's needs and wants. Customer Relationship Management in banks can be defined as the ability to understand, anticipate and manage the needs of the customers, interaction and relationship resulting in increased profitability through revenue and growth and operational efficiencies.

E-CRM in banks can be defined as the use of the web and various other electronic channels, technologies that enable automated and electronic management of customers' relations. E-CRM, on the other hand, refers to other factors like personalization, customization, one to many and many to many transactions. It permits business speed and real time response to customer or markets through the new tools such as e-mail, Internet, telephone, chat facilities etc. that reduces the cost of customer contacts.

To serve more and retain customers, banks in India have changed the old concept of accepting deposits and lending money. Use of technology by banks has increased the productivity very fast through automation of banking operations. The electronic technology instruments adopted by Indian banks are ATMs, Telex, Fax, internet, Tele banking, E-banking, Electronic clearing services, on-line banking, mobile banking, wireless banking services, and electronic funds transfer. With the introduction, implementation and adoption of these techniques by the banks have totally revolutionized the functions, operations, administration, decision-making and management information system. All these techniques or instruments helped the banks in retaining the existing customers, attracting new customers and provide lot of services with the help of these instruments to give them satisfaction.

**Automated Teller Machines (ATMs):** - An ATM is a machine that can deliver cash to the customers on demand after authentication. This banking service is made available 24 hours a day, 7 days a week and 365 days a year. Besides withdrawal of cash ATMs also provide facility to deposit cash, deposit cheques, prepare drafts, transfer money, mini statement of accounts and shows details of the account. Customer can even ask for new cheque books through ATMs. ATM is a user-friendly system and customer does not require any training to use it. It is totally menu driven which displays step-by-step instructions to operate the transactions.

**Phone Banking (Tele Banking):** - Technological developments have totally changed the face of banking industry. Phone or Tele Banking means carrying out of banking transaction through telephone. A customer can call up the banks help line or phone banking to conduct transaction like transfer of funds, making payments, checking of account balance, ordering cheque books etc. This also reduces visits of the customers to banks.

**Internet Banking- E-Banking:** - Internet banking means carrying out banking transactions via Internet. It comprises a variety of projects that aim to improve not only the bank's efficiency but also customer services. E-banking programme allows customers to use the Internet for basic functions in corporate and retail banking and credit cards. These include making inquiries about account balance and getting statements and real time funds transfers. Thus, the need to visit a branch is completely eliminated by this technology. It also helps in serving the customers better and tailoring products better suited to the customer requirements. Net

banking helps a bank spread its reach to the entire world at a fraction of the cost.

**Mobile Banking:** - Banks can now help a customer conduct certain transactions through Mobile phone with the help of technology like SMS etc. This helps a bank to combine the Internet and telephone services which provide its customers better convenience and facilities.

**Total Branch Mechanization (TBM):** -Dr. Rangrajan Committee suggested TBM as early as 1988. Banks have installed Local Area Network at the major centers of the country to make all the banking services available at single window to their customers.

**Electronic Funds Transfer (EFT):** -Electronic funds transfer has been introduced by the RBI for public sector banks to help them offer their customers money transfer service from any bank's branch to any other bank's branch. EFT system presently covers more than 4800 branches of public sector banks in four metro cities as well as in many of large cities.

**Communication Technology (SWIFT):** - Society for Worldwide Inter-Bank Financial Telecommunication (SWIFT) was formed as a cooperative organization by International Banks Foreign Investors. It provides a computerized network amongst international banks in the members' countries. This technology has made available the fastest banking services to customers who are engaged in international business.

**INFINET and VSAT networks:** -RBI in India to upgrade the country's payment and settlement system has initiated Indian Financial Network (INFINET), a Closed User Group (CUG) network for banking and

financial sector. INFINET uses VSAT (Very Small Operative Terminal) technology. Some of the major applications of INFINET in banking services are e-mail, any branch banking, treasury management, EFT, and clearing and settlement system for securities.

**Wireless Banking Services:** - Wireless Banking Services is an emerging trend in banking. It enables one to manage their accounts with GSM/GPRS WAP mobile phones, any time anywhere. The service uses WAP (Wireless Application Protocol) technology to allow access to accounts in a more convenient, secure and flexible manner. With wireless banking services the following operations can be performed by the customers:-

1. Check account balance and transaction details.
2. Make funds transfer to self or third party accounts.
3. Buy and sell foreign currency.
4. Trade securities.
5. Inquire mutual funds and securities trading account portfolio and account balance.
6. Personalized stock watch list to monitor stock price performance.
7. Inquire free real-time stock quotes.
8. Inquire deposit/exchange/loan rate.

To avail wireless banking services, one just needs to log in the wireless banking service with their existing customer ID and PIN provided for e-banking. In wireless banking all data is secured because all communications generated from the wireless banking services will be strongly encrypted to safeguard customer privacy.



**Electronic Clearing Services:** -It is simple, reliable and cost effective solution for bulk and repetitive payment transactions like salary, pension, interest, commission, etc. by public or private companies and government departments through banks. Under this system, the companies, which have to make bulk payment to a large number of beneficiaries, prepare the credit instructions on the magnetic media and submit the same to Reserve Bank of India through their banks. RBI processes the data, arrive at inter-bank settlement, provide bank, and branch wise report containing the details of payments to facilitate fast payment to the beneficiaries.

**Point of Sales Terminals:** - It consists of two key components- computer terminal that is linked on line to computerized customer information files in bank and a plastic magnetically enclosed transaction card that identifies the customer to the computer. During transaction, the customer's account is debited and the computer for purchase credits the retailer's account. It may be deduced from the above that the technology in banking has been used in four major ways: -

1. To handle a greatly expanded customer base.
2. To reduce substantially the real cost of handling payment.
3. To liberate the banks from the traditional constraints on time and place.
4. To reduce new products and services.

**Gains of E-CRM:** - E-CRM if implemented with fullest zeal and favour will delight both customers and the banks.

**To the Customers:** -

1. No matter where the customer is in the world, on-line banking is just a click away. Balance enquires, requests for services, issuing

instruments, passing instructions, etc. from anywhere in the world are possible.

2. Managing funds in real time and most importantly 24 hours a day and 7 days a week.
3. Convenience acts as tremendous psychological benefits all the time.
4. Brings down the cost of banking to the customer over a period of time.
5. Cash withdrawal from any branch or ATM.
6. On-line purchase of goods and services including on-line payment for the same.

**To the Banks: -**

1. Innovative, secure, address competition and presents the bank as technology driven in the modern competitive market.
2. Enable banks to render 24 hour, all the day's service to customers.
3. Reduces customer visits to the branches and there by human interventions.
4. Excellence in customer services, prompt attention to their needs and quick disposal of grievances.
5. Immediate inter-branch reconciliation thereby reducing chances of fraud and misappropriation.
6. Effective medium of promoting various schemes of the bank.
7. E-banking sites can act as a revenue earner through promotional activities by consumer corporate.
8. Way for individualized and customized services by integrated customer data.
9. Quick decision making at all managerial and executive levels.
10. Faster movement of inventory records.

11. Paper less transactions.
12. Faster realization of money.
13. Better communication, information and coordination.

With the introduction of electronic banking, banks are moving their focus of payment from the physical presence of money to the use of electronic money. Customer can perform banking transactions without having to step into the office or the branch. The bank, which provides value-added services and satisfaction to customers, should be the winner in the market. By way of launching new products, the banks are trying to make the “near” customers to “dear” ones.

**5.3 Frauds in Credit Cards Business:** - Credit card fraud is one of the biggest threats to business establishments today. In order to combat the fraud effectively, it is important to first understand the mechanisms of executing a fraud. Credit card fraudsters employ a large number of modus operandi to commit fraud. In simple terms, credit card fraud is defined as under:

“When an individual uses another individual’s credit card for personal reasons and while the owner of the card and the card-issuer are not aware of the fact that the card is being used. Further, the individual using the card has no connection with the cardholder or issuer, and has no intention of either contacting the owner of the card or making repayments for the purchases made.”

Credit card fraud can be generally termed as an “Identity Theft”; where a person may use the identity of another person in a manner that amounts to fraud or deception-usually economic in nature. The general definition for

“Identity Theft” and “Identity Fraud” is “Terms used to refer to all types of crime in which someone wrongfully obtains and uses another person’s personal data in some way that involves fraud or deception.” The term personal data refers to the cardholder’s bank account or credit card number and other valuable identifying data.

**Modus-Operandi of Credit Card Frauds:** - Credit card is a convenient method of payment, but it does not carry the risk. Despite the precautions taken by the cardholders, credit card or credit card information (personal data) is fraudulently obtained and later on, this credit card information is used to deceive the card-holder, the merchants or the issuing bank. Contrary to popular belief, merchants are far more at risk from credit card fraud than cardholders. While consumers may face trouble trying to get a fraudulent charge reversed, merchants lose the cost of the product sold, pay charge fees back and fear from the risk of having their merchant account closed.

Credit cards frauds are committed in the following ways: -

1. An act of criminal deception by use of unauthorized account and / or personal information.
2. Illegal or unauthorized use of account for personal gain.
3. Misrepresentation of account information to obtain goods and/ or services.

The methods, which are commonly adopted to commit frauds, are elucidated as under: -

**(A)- Theft of Credit card and Stealing Personal Information:** -

Fraudsters may steal wallet or purse through pick pocketing. They may steal personal information or records, mail, bank and credit card

statements; credit card offers etc. They may look through house waste, the waste of business place or public waste. Global surveys and studies on credit card usage show that one steady source of credit card numbers is the thrown away charge slips. These charge slips have the 16 digit credit card number and the expiry date help the hackers or fraudsters to conduct on-line transactions. Another method used by the criminals is to get hold of the credit card and take over the credit card account through postal theft. The criminals have agents in the postal services and courier services who will assist them in getting hold of credit cards before they are delivered.

**(B)-Credit Card Skimming:** - The fraudster may steal credit card number and other credit card related information by capturing the information in a data storage device known as “skimmer”. Credit card skimming is a method by which encoded information from the magnetic strip of a credit card is generated by electronic card reader (skimmer). In the hand of criminals, the electronic reader becomes a handy tool to gather credit cardholder’s information to use in illegal transactions and purchases. Usually, the criminal connects the skimmer to the credit card machine (POS Terminal) or a portable skimmer could be used to swipe the card when one is not looking. At the time of purchase, this information will automatically be stored in the skimmer, which, in turn, will be used by the criminals at a later stage to make unauthorized purchases or encode this information on the magnetic strip of a counterfeit card. Credit card skimming often occurs in business where credit cards are used regularly, such as restaurant and other entertainment venues. In restaurants, one will normally lose sight of his credit card when the waiter takes it to pay the bill.

**(C)-Phishing/Bogus Internet website:** - “Phishing” also called “carding” or “brand spoofing” is a creation of email message and web pages that replicate existing legitimate site of well-known brands and businesses to trick consumer into divulging personal financial information such as bank or card account number, ATM PIN or other personal identifiers. Phishing occurs from time to time as criminals look for opportunities to steal the information through email or phone by posing as from card issuing bank and claiming that the cardholder has a problem with his account. The stolen data from successful “phishing” activities are then used to commit fraud.

**(D)- Counterfeit/ Cloning of Credit Cards:** - Some syndicate uses the latest technologies to create more realistic looking credit cards. These counterfeit credit cards will often have a complete hologram and fully encoded magnetic strip. In the counterfeit cards, the hologram is fixed on the top of the card, whereas it is embedded in the plastic during the manufacturing process of genuine cards. These counterfeit cards look like genuine cards with naked eyes.

**(E)-Account Takeover:** - Once the fraudsters get access to the personal information, they don't even need your credit card. They call the card-issuing bank and change the address of the genuine cardholder. Then they report to the issuing bank that the credit card has been lost and make request for issue of a new card. The issuer bank then sends the card at the new address and they manage to collect the card by using false identification. The statement of account will be sent to new address and the victim will be unaware of the fraud that is occurring with his card.

Here, the main object of the fraudster is not restricted to usages of the account but to make the best out of it and use every penny available.

**(F)-Frauds through On-line Shopping:** -Most of the frauds are committed through using data, which are obtained while shopping online by the genuine cardholder. Simply punching certain digits in a machine can be enough for a fraudster to memorize and to commit fraud. The sole reason is the growth of technology where a person does not really need to identify himself. A simple example of purchasing air tickets online explains how simple it is to steal someone's identity. To buy air-tickets, all that a buyer has to do is to put his credit card number in the required place on the website of the air-lines. Any onlooker can simply memorize/ note it down and empty the credit card holder's credit limit and buy as many air-tickets or make as many purchases as the fraudster may like online. No signature is required in this kind of transaction.

**(G)-Third Country Card Misuse:** - Such crimes are rampant in countries like Taiwan and Malaysia. Organized criminals are from third country use counterfeit/fake credit cards; especially in large sized departmental stores. The high value purchase pattern at such stores is done within a day or two and the criminals thereby move out of that country. The merchant establishment suffer huge amount of fraudulent acts.

**Credit Card:** - Credit card is a plastic bearing an account number assigned to a cardholder with a credit limit that can be used to purchase goods and services and to obtain cash disbursements on the credit, for which a cardholder is subsequently billed by an issuer for repayment of the credit extended, at once or on an installment basis.

The following are the terms related to credit card and its personalization:

**(1)- Embossing:** - A system of crediting raised letters and numbers on the face of the card.

**(2)-Encoding:** -A device for recording data on the magnetic strip on the back of the card. The magnetic strip contains data that will tell a reading machine who you are and what your account number is, etc. It is a plastic material with magnetizable power mixed in with it. The strip can be magnetized by exposing it to a strong magnetic field. For security reason, Personal Identification Number (PIN) and account balances are not recorded on the magnetic strip.

**(3)-Chip:** - Chip based credit cards looks the same as traditional magnetic strip cards; but have a microchip embedded. The chip embedded in the card is a security and data storage device programmed to use advanced cryptography to allow components of the payment system, including the terminal and the card issuer, to verify that it is a genuine card and not a counterfeit copy. The chip can store considerable amount of information when compared to the magnetic strip on existing cards.

**(4)- Personal Identification Number (PIN):** - A Number (confidential in nature) associated with the card that is supposedly known only to the cardholder and the card issuer. This number is used for verification of cardholder identity while transacting business through credit card.

**(5)- Card numbers:** - The numbers found on credit card have a certain amount of internal structure and share a common numbering system.



### **ATM Fraud**

Automated Teller Machine is an electronic machine, which is linked to the accounts and records of a banking transaction without visiting bank premises. ATMs are virtual banks, which allows the user to withdraw cash, pay bills, balance inquires, cash deposits etc. The machine is operated with the help of an access device, which is a card, code (PIN), or any combination thereof. Some ATM cards are also called debit cards, which can be used for making purchases. Customers' account is charged immediately on purchases.

As with my device containing objects of value, ATMs and the systems they depend on to function are the targets of fraud. Fraud against ATMs and people's attempts to use them takes several forms. They are as follows: -

**Fake ATMs:** - The first known instance of a fake ATM was installed at a shopping mall in Manchester, Connecticut in 1993. By modifying the inner workings of a Fujitsu model 7020 ATM, a criminal gang known as the Buckland's Boys was able to steal information from cards inserted into the machine by customers.

**Operational Fraud:** - In some cases, bank fraud could occur at ATMs whereby the bank accidentally stocks the ATM with bills in the wrong denomination, therefore giving the customer more money than should be dispensed. The result of receiving too much money may be influenced on the card Holder Agreement in place between the customer and the Bank.

There is one case reported by users in Malaysia dated 24 January 2006. ATM behavior can change during what is called "stand-in" time, where

the Bank's cash dispensing network is unable to access databases that contain account information (possibly for database maintenance). In order to give customers access to cash, customers may be allowed to withdraw cash up to a certain amount that may be less than their usual daily withdrawal limit, but may still exceed the amount of available money in their account, which could result in fraud.

**ATM card fraud:** -For a low-tech form of fraud, the simplest is to simply steal a customer's card. In this scenario, the user's PIN is observed by someone watching as they use the machine; they are then mugged for their card by a second person, who has taken care to stay out of range of the ATM's surveillance cameras. However, this offers little advantage compared to simply mugging the victim for their money, and carries the same risks to the offender as other violent crimes.

A later variant of this approach is to trap the card inside of the ATM's card reader with a device often referred to as a Lebanese loop. When the customer gets frustrated by not getting the card back and walks away from the machine, the criminal is able to remove the card and withdrawal cash from the customer's account.

The Lebanese Loop could also be combined with the Droplet method of stealing the PIN, where small drops of oil are placed on the PIN pad keys. After a customer used the ATM, one can see which keys were pressed, which makes it easier to guess the entered PIN. A simple counter measure to this attack is to wipe the PIN pad before or after each use. Another simple form fraud involves attempting to get customer's bank to issue a new card and stealing it from their mail.

**Cloning:** - The concept and various methods of copying the contents of an ATM card's magnetic stripe on to a duplicate card to access other people's financial information was well known in the hacking communities by late 1990.

In 1996 Andrew Stone, a computer security consultant from Hampshire in the UK was convicted of stealing in excess of 1 million pounds by pointing high definition video cameras at ATMs from a considerable distance, and by recording the card numbers, expiry dates, etc. from the embossed detail on the ATM cards along with video footage of the PINs being entered. After getting all the information from the videotapes, he was able to produce clone cards which not only allowed him to withdraw the full daily limit for each account, but also allowed him to sidestep withdrawal limits by using multiple copied cards. In court, it was shown that he could withdraw as much as 10,000 pound per hour by using this method. Stone was sentenced to five years and six months in prison.

By contrast, a newer high-tech modus operandi involves the installation of a magnetic card reader over the real ATM's card slot and the use of a wireless surveillance camera or a modified digital camera to observe the user's PIN. Card data is then cloned onto a second card and the criminal attempts a standard cash withdrawal. The availability of low-cost commodity wireless cameras and card readers has made it a relatively simple form of fraud, with comparatively low risk to the fraudsters.

**Combating Stolen Cards and Information:** - In an attempt to stop these practices, countermeasures against card cloning have been developed by the banking industry, in particular by the use of smart cards which cannot

easily be smart cards which cannot easily be copied or spoofed by un-authenticated devices, and by attempting to make the outside of their ATMs tamper evident. Older chip-card security systems include the French carte Blue, Visa cash, Mondex, Blue from American Express and EMV 96 or EMV3.11. The most actively developed form of smart card security in the industry today is known as EMV 2000 or EMV 4.x.

EMV is widely used in the UK (Chip and PIN) and parts of Europe, but when it is not available in specific area, ATMs must fallback to using the easy to copy magnetic strip to perform transactions. This fallback behavior can be exploited.

**Benefits of Electronic-Banking:** -E-banking has been helpful for various sections of the society. They are: -

**(A)-To the Customer: -**

1. **Anywhere Banking:** Customer can open an account in one part of the country and still have access to his account not only from the branch where he opened account but also from any other part of the world.
2. **Anytime Banking:** Customer can bank at any time (24 hours a day, 7days a week).
3. Cash/card free banking through PC banking.
4. Avail bank service at cheaper charges since, e-banking reduces cost over a period of time.
5. Cash withdrawal from any branch/ATM.
6. On-line purchase of goods and services including on-line payment for the same.

7. Convenience acts as a marvelous psychological benefit all the time.

**(B)- To the Bank: -**

1. Reduces human intervention by reducing customer visits to the branch.
2. E-banking provides competitive advantage to the bank.
3. E-banking provides unlimited network to the bank through which it can provide banking facility to the customer.
4. Any ATM on the roadside can provide the cash withdrawal needs of the customer.
5. Scope and potential for better profitability through (ATM) better monitored and planned by establishing a centralized data warehousing and using largest data mining tools.
6. Chances to reduce fraud and misappropriation by inter-branch reconciliation.
7. Possibility of effective promotion of various schemes of the bank.
8. Retention of existing customers and attracting potential customers by better customer relationship management, which is possible through e-banking.

**Benefits to Making EFT Payments: -**

1. Allows you to pay your taxes automatically from your bank account.
2. Eliminates the need to write cheques.
3. Simplifies the payment of taxes.
4. Saves your time and money on postage and mailing cheques.
5. Ensures timely tax payments.

6. Deducts tax payments from your account on the day you specify.
7. Eliminates the risk of your payments being lost in the mail.
8. Ensures that payments can be located.
9. Provides security and confidentiality for all transactions.

#### **5.4 Risks of Electronic-Banking: -**

E-Banking is beneficial to all sections of the society, but there are certain risks which have to be taken care by the management, they are: -

**(1)-Operational Risk:** - New technology is helpful to provide bank services through electronic media but it has significant implications on banks' operations. The operations risk arises from fraud, processing errors, system disruptions, or other unanticipated events resulting in the institutions inability to deliver products or services. This risk exists in each product and service offered. The level of transaction risk is affected by the structure of the institution's processing environment, including the types of services offered and the complexity of processes and supporting technology. For providing bank services through electronic media requires some changes in the procedures followed by the bank for efficient management of e-banking risks in the areas of security, data confidentiality, data system integrity, system availability and outsourcing.

**(2)- Reputation Risk:** - Banks open themselves to reputational risks if they are unable to practice to provide a consistent, timely, high standard service in accordance with expectations they have set for the customer

base. In addition to system availability and integrity, breaches in data confidentiality and any other glitches to the security of operations can damage a bank's reputation.

**(3)-Legal Risk:** - E-banking does not have boundaries. Virtual banks can expand their business beyond geographical boundaries faster than traditional banks. In some cases the banks might not be fully prepared and lack of sufficient resources to become entirely familiar with the local laws and regulations before they begin to offer services in a new jurisdiction.

**(4)-Security Controls:** - The security challenges to E-banking services are greater than those of conventional banking services. They require more specific attention by bank management.

**Barriers of Electronic-Banking:** -

1. The Lack of proper commercial and legal systems for doing business through the web.
2. The Lack of strong national telecom, hardware and software infrastructure which will make fast, reliable access to the Internet at a lower cost.
3. Lack of policy from the banks regarding the conduction of business electronically.
4. Lack of secure payment system.
5. Lack of system that allows for cross-border E-commerce transactions.
6. Lack of awareness among users about importance of E-commerce and its benefits.

### **5.5 Consumer in Banking Sector: -**

In order to survive, commercial banks have to seek business by aggressively marketing their products. Product differentiation is often employed as a major technique to survive in competitive market. Since product differentiation on the interest front and service charges is ruled out for Indian banks, it appears that banks have to improve the quality of services.

In order to mobilize more deposits and attract customers to use the services of a particular bank, that bank has to necessarily differentiate its customer services from other banks and to offer better customer service means satisfying the needs of customers, at right time, and in a right manner. It is necessary that bankers tailor their services to the needs of customers and not vice versa. A large portion of customers' complaints arises because of the disparity between customer expectation and bank services.

Products offered by banks have been changing over years, particularly in recent years. These products are getting refined and revised in the light of customer need, but not promptly enough or adequate and hence dissatisfaction arises. There are abnormal delays in receiving payments and customers have to wait indefinitely without anybody attending to them properly at the counter. Even the issue of cheque book takes twenty to thirty minutes because the officer is always busy with cheques, vouchers and registers. Updating of pass book also takes long time. Delivery system for customer services comprises of five elements i.e. Speed, Timeliness, Accuracy, Courtesy and Concern.



**Causes for Customer Dissatisfaction:** -There are various reasons caused by customer dissatisfaction. They are:

1. Delay and inaccuracy in putting through transactions;
2. Delay and inadequacies in correspondence;
3. Delayed, faulty and unhelpful decision-making;
4. Absence of elementary discipline;
5. Undue emphasis of staff in observance of rules and procedures;
6. Inconvenience associated with credit apprehension;
7. Lack of uniformity in bank charges;
8. Customers being viewed as a faceless unit; and
9. General attitude of unconcern and apathy for clients.

**Reasons for Deterioration in Customer Services:** -

1. Since nationalization of fourteen major scheduled commercial banks, have not only extended the branch network to rural and non-banking areas, but also expanded and diversified their business at a dramatic speed by covering a huge number of people even in the remote corners of this vast country. This has caused an enormous strain on banks in terms of manpower facilities, system and procedures and management capabilities leading to customer services falling behind customer expectations.
2. Customer expectations is the most important factor in customer services have increased enormously and in a variety of ways in recent times because of growing awareness among the bank customers, social responsibilities caste on the banks.

3. Attitudes of staff impinge most significantly on the services rendered, but bank employees are not oriented to the desired extent to be helpful to the customers.
4. Management deficiencies have also contributed to unhelpful employees' attitude and ignored systematic efforts for improvement in customer services through expansion of training and implementation of latest concepts in bank management.

#### **5.6 Core Banking Services of Indian Banks: -**

Now a day's banks are more and more zealous for providing Core Banking services in India. From practical point of view there is much to be achieved for implementing international standard as conditions of various Banks are different in nature viz., infrastructure, capital adequacy and human relation norms.

Last year, the aggregate total income of 10 private sector banks increased by 51.7% besides an increase in fee based income by 41.7%, whereas Public Sector Banks could not step to the desired level. Mr. J.N. kapur, President of State Bank of India Shareholder's Association, suggested remedial measures to the central Board of State Bank for improving efficiency and augmenting profitability.

1. To make the Bank as Global Bank and No. 1 bank of Asia.
2. To increase the profitability of the bank.
3. To increase the value of the shares of the investors by declaring higher dividend, bonus shares and right shares.
4. To eradicate corruption in the Bank
5. To control wasteful expenditure at all levels.

6. To check indecisiveness i.e. policy of 'Refer & defer' at various levels of administration.
7. To provide efficient, courteous and speedy customer's services.
8. To eradicate restrictive practices at various levels of functioning of the Bank.
9. To avoid wasteful and unproductive litigation of all type.

During the course of deliberations Shri Kapur surprised that State Bank of India could not maintain even two digits growth during the years 2005-06, 2006-07. Even the fee based income of State Bank of India decreased by 22.4%, whereas private Bank ICICI Bank showed an increase of 41.8% in fee based income. Shri Kapur further warned about unchecked frauds and suggested to incorporate huge amount of frauds in Annual Reports of the Bank.

While analyzing the grievances of the constituents of the Bank it was felt that it differs from Bank to Bank but the common observed problems are:

- Lack of connectivity during peak hours which means Central Server cannot take full load of Bank's transactions.
- Customers have to wait and stand in long queues on account of slow rate of disposal.
- Lack of proper technical trained staff at various branches resulting in dislocation of work and delay in service.
- Non-attending of complaints or faults by so called 'trusted' assigned agencies at branch level.
- Pass book printers often do not work properly and regularly.
- The untrained officers are posted at the branches as Branch Managers who do not possess required knowledge of modern

system of 'Core Banking', causing day by day problems for the customers. Even fast changes in the CBS system do not reach to the dealing operating staff on time.

Now it is for the Apex Bank i.e. Reserve Bank of India to examine the working of the core banking system in order to bring it at par with International standard.

**REFERENCE-**

1. Anitha S, (October, 2008), "Credit Cards Frauds and Precautions." Professional Banker, The ICFAI University Press, Hyderabad, India, volume 8(10) pp37-39.
2. Agarwal V. K., (November, 2008), "Core Banking Services of Indian Banks." Banking Finance, Kolkata, India, volume 21 (11) pp23.
3. Bhavani R and Prakash V, (October, 2008), "On Line Banking." Professional Banker, The ICFAI University Press, Hyderabad, India, volume 8(10) pp50-53.
4. Dhade Aruna and Mittal Manish, (May 2008), "Preference, Satisfaction Level and Chances of Shifting: A Study of the Customer of Public Sector and New Private Sector Banks." The ICFAI Journal of Bank Management, volume 7(2), pp62-68.
5. Dudija V.D., (2006), "Retail Business" Commonwealth Publishers, Delhi, India.
6. Deva Vasu, (2003), "E-Services" Commonwealth Publishers, Delhi, India.
7. Farooqi S., Ahmed S. A., (November, 2008), "Branchless Banking-A New Dimension of Financial Inclusion." Banking Finance, Kolkata, India, volume 21 (11) pp16-21.
8. Gupta S.L. and Mittal Arun, (October, 2008), "Mobile Banking Present Status and Future Perspectives." Chartered Financial Analyst: Indian Banking 2007-08, The ICFAI University Press, Hyderabad, India, volume 14 (10) pp98-100.
9. Gupta Sumeet, (July 2008), "A Study of Customers Perception towards E-Banking with Special Reference to Jaipur City."

- Professional Banker, The ICFAI University Press, Hyderabad, India, volume 8(6), pp 66-74.
10. Geetika, Tanuj Nandan and Ashwani Kumar Upadhyay, (May 2008), "Internet Banking in India." The ICFAI Journal of Bank Management, Hyderabad, India, volume 7(2), pp47-60.
  11. Goel Ritendra, (2007), "E-Commerce" New Age publications New Delhi, India.
  12. Krishnamurthy Mallikarjunan, (June, 2008), "Product Innovation in Banking Industry." Professional Banker, The ICFAI University Press, Hyderabad, India, Volume 8(6), pp51-54.
  13. Kumar Narendra, Anjana and Kavita, (June, 2006), "E-CRM in Banks." Banking Finance, Kolkata, India, volume 19(6) pp10-12&15.
  14. Kumar Narender and Kumar Mohan, (February 2005), "Bank Computerization in India." Banking Finance, Kolkata, India, volume 18(2) pp12.
  15. Manoharan B., (February, 2008), "ATM Fraud Protection Guidelines." Banking Finance, Kolkata, India, volume 21 (2) pp15-19.
  16. Malyadri P. and Rao K. Srinivasa, (February, 2008), "E-Payments: Some Emerging Issues." Banking Finance, Kolkata, India, volume 21 (2) pp20-23.
  17. Patnaik U.C. & Chhatoi Basudev, "Bank Marketing" Sonali Publications, New Delhi, India, 2006.
  18. Prasad V Alakh and Bhatnagar S.D, (September 2005), "Security Issues in Electronic Commerce." Banking Finance, Kolkata, India, volume 18(9) pp24-30.

19. Ravi R. A., (May 2008), "User Perception of Retail Banking Services: A Comparative Study of Public and Private Sector Banks." *The ICFAI Journal of Bank Management*, Hyderabad, India, volume 7(2), pp32-42.
20. Radha Krishna, (February 2008), "The Role of Six Sigma in Banking" *Professional Banker*, The ICFAI University Press, Hyderabad, India, volume 8(2) pp. 37-40.
21. Reddy S.V, Reddy T. Jayarami and Sakunthala B, (November 2007), "Profitability and Productivity in Indian Public Sector Banks." *Banking Finance*, Kolkata, India, volume 20(11) pp13-15.
22. Reddy Raghunatha S. and Reddy Sudarsana G., (January 2005), "Banking Services Through E-Banking." *Banking Finance*, Kolkata, India, volume 18(1) pp13-17.
23. Reddy B. Ramchandra, (May, 2004), "Some Aspects of E-Banking." *Banking Finance*, Kolkata, India, volume 17(5) pp17-19.
24. Singh Sultan, (August, 2008), "A Study of the Quality of Services Provided to SSI (Small Scale Industries) Customers by Public Sector Banks." *The ICFAI Journal of Management*, The ICFAI University Press, Hyderabad, India, volume 7(3) pp71-72.
25. Srivastava Ashish, (February 2008), "Payment and Settlement Systems in India." *Professional Banker*, The ICFAI University Press, Hyderabad, India, volume 8(2) pp. 17-24.
26. Sharma A. K. and Nanda G. L., (July, 2006), "Frauds in Credits Cards Business." *Banking Finance*, Kolkata, India, volume 19(7) pp15-18.

27. Sivaloganathan K, (December 2004), "Payment via Electronic Media: A Competitive Advantage to Banking Industry." *Banking Finance*, Kolkata, India, volume 17(12) pp14-15&23.
28. Thiagarian T.S., (April 2008), "Training needs of the Banking Personnel" *Banking Finance*, Kolkata, India, volume 21(4) pp13-15.
29. Vinayagamoorthy A., (February, 2008), "Globalization and Recent Trends in Banking." *Banking Finance*, Kolkata, India, volume 21 (2) pp9-14.



## *Chapter 6*

# **Analysis and Interpretations**

---

# **Analysis and Interpretations**

The data, after collection, has to be processed and analyzed in accordance with the outline laid down for the purpose at the time of developing the research plan. Analysis of data means studying the tabulated material in order to determine inherent facts or meanings. This is essential for a scientific study and for ensuring that we have all relevant data for making contemplated comparisons and analysis. Technically speaking, processing implies editing, coding, classification and tabulation of the collected data so that they are amenable to analysis. The term analysis refers to the computation of certain measures along with searching for patterns of relationship that exist among data-groups. It involves breaking down existing complex factors into simple parts and putting the parts together in new arrangements for the purpose of interpretation. In this study the collected data has been analyzed with the help of simple statistical tools like percentages, Pie charts, bar diagrams, Chi-square test, and Z-test.

### **6.1:-Data Analysis and Findings of Section (A):-**

In section (A), a structured questionnaire is designed specially to meet the objectives of socio-economic characteristics of the sample respondents i.e. consumers of Bundelkhand Regions. It contains 09 questions which show the general profiles of the consumers in Bundelkhand Region towards the services of Electronic money. The various socio- economic characteristics considered for this study are respondent's Sex, Age, Educational Qualifications, Occupations, and Monthly Income. The parameters have

been quantified by calculating the percentage tables, using Pie charts, and bar diagrams. Thus, the data analysis and findings of section (A) is concerned with analyzing these factors.

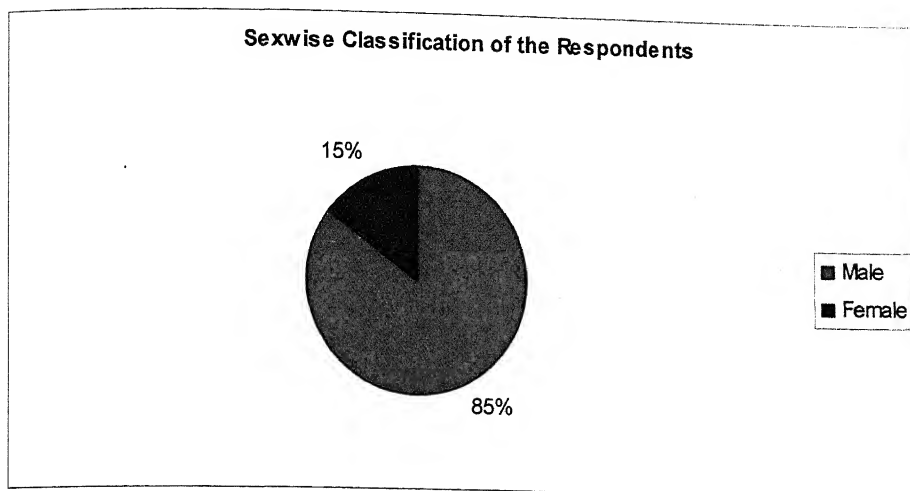
**6.1.1:-General Profile of Consumers:** - The general profile of consumer is given in the following table-

Table 6.1: The Details Regarding General Profile of the consumers in Bundelkhand Region

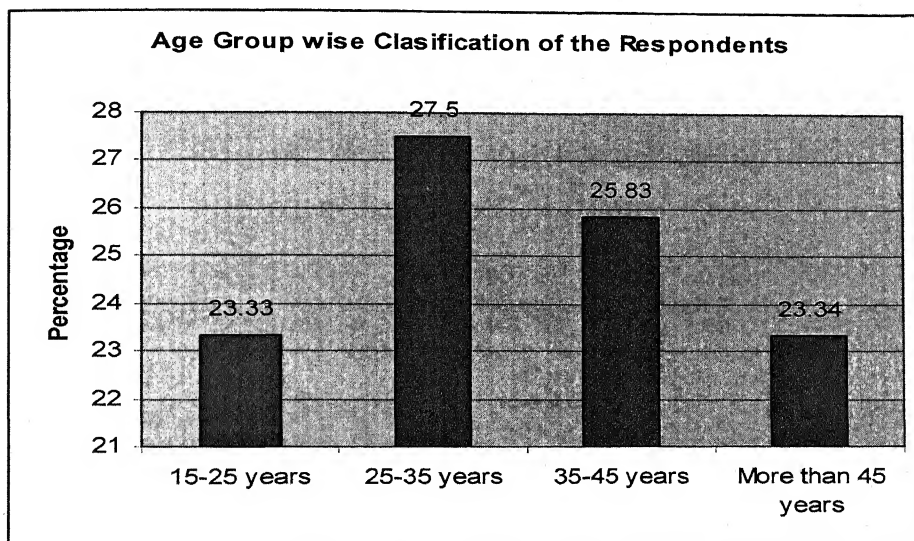
Factors	Classification	No. of Respondents	Percentage
Sex	Male	102	85
	Female	18	15
	Total	120	100
Age	15-25 years	28	23.33
	25-35 years	33	27.5
	35-45 years	31	25.83
	>45 years	28	23.34
Educational Qualification	High School	06	5
	Intermediate	11	9.17
	Graduate	45	37.5
	Post Graduate	58	48.33
Occupation	Govt /Semigovt.	54	45
	Business	27	22.5
	Profession	32	26.67
	Farmer	07	5.83
Monthly Income (Rs.)	<10,000.	39	32.5
	10,000-20,000.	46	38.34
	20,000-50,000.	29	24.16
	>50,000.	06	5

**Sources: -Primary Data.**

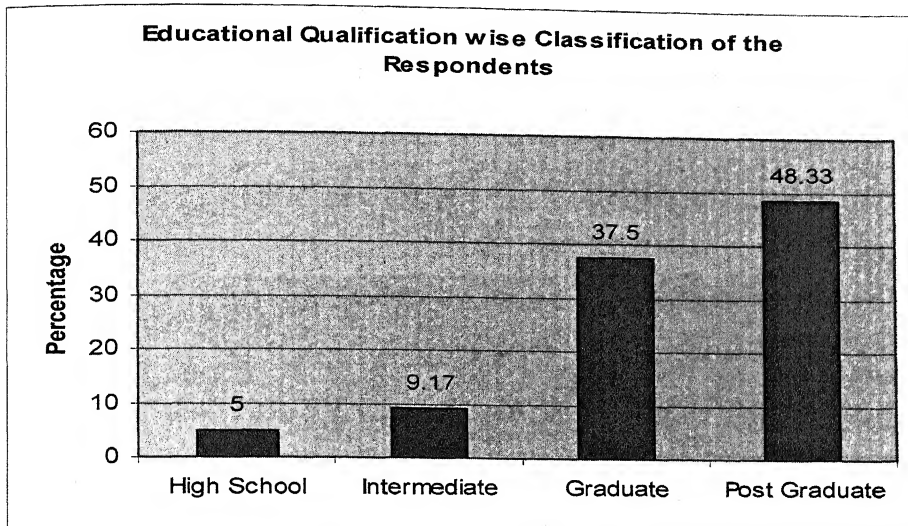
**Sex Ratio:** -The table 6.1 reveals that 85% respondents are male, and 15% respondents are female participants in the services of electronic money. The ratio between female and male participants came to 1:5.67. It can be explained through a Pie chart 6.1 as follows-



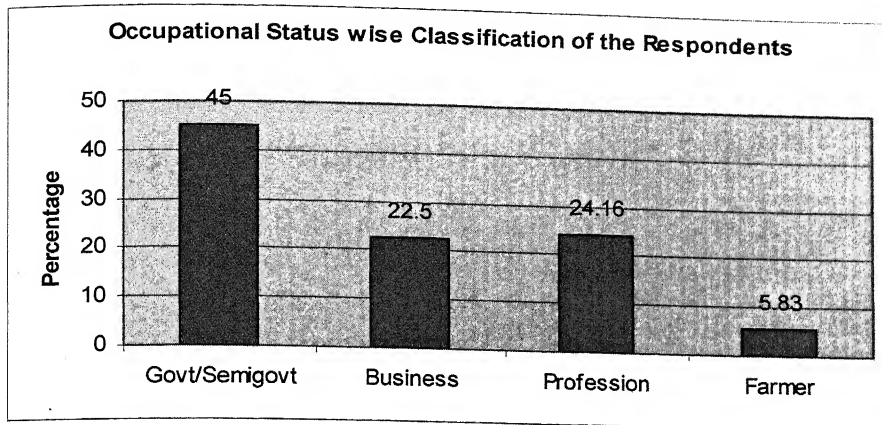
**6.1.2:-Age wise Participants:** -Regarding the age of participants, 27.5% respondents are having the age of the 25-35 years, 25.83% respondents are having the age of 35-45 years, and 23.33% of the respondents who have in 15-25 years and same have more than 45 years. It means 76.67% participants were below the age of 45 years. It can be explained through a bar diagram 6.2 as follows-



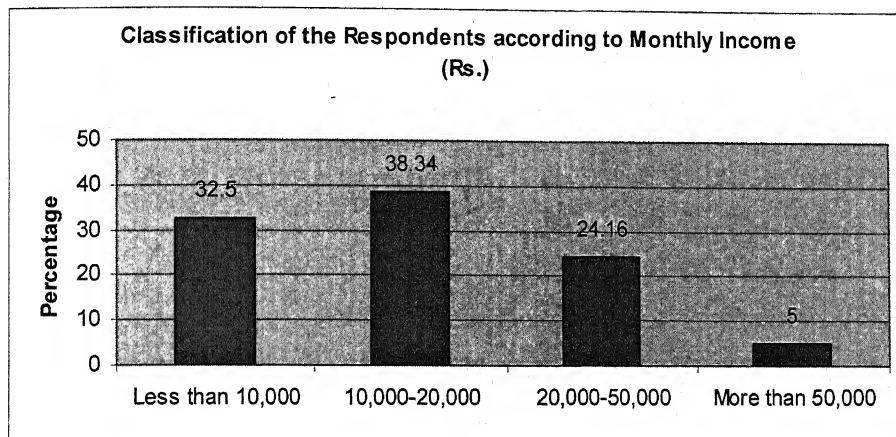
**6.1.3:-Educational Level of the Respondents:** -Among the all respondents, 48.33% of the respondents are post graduates, 37.5% of the respondents have the graduate degree, 9.17% of the respondents are intermediates, and 5% of the respondents are simply the High school. This can be shown through the bar diagram 6.3 as follows-



**6.1.4:-Occupational Status of the Respondents:** -Regarding the occupation of the participants, 45% respondents are Government/ semi government employees who are taking the advantages of E-money services, 26.67% professionals are benefited with E-money services, business man participants are 22.5%, and only 5.83% farmers are taking the advantages of E-money services. It can be explained through a bar diagram 6.4 as follows-



**6.1.5:-Income Level of the Respondents:** -Regarding monthly income mostly i.e.38.33% of respondents are between Rs.10,000-20,000, 32.5% of the respondents having the income less than 10,000, 24.16% of the respondents having the income between 20,000-50,000, and 5% of the respondents who have the monthly income more than 50,000. It can be explained through bar diagram 6.5 as follows-



**6.1.6:-Residential Profile of the Respondents in Bundelkhand Region:**

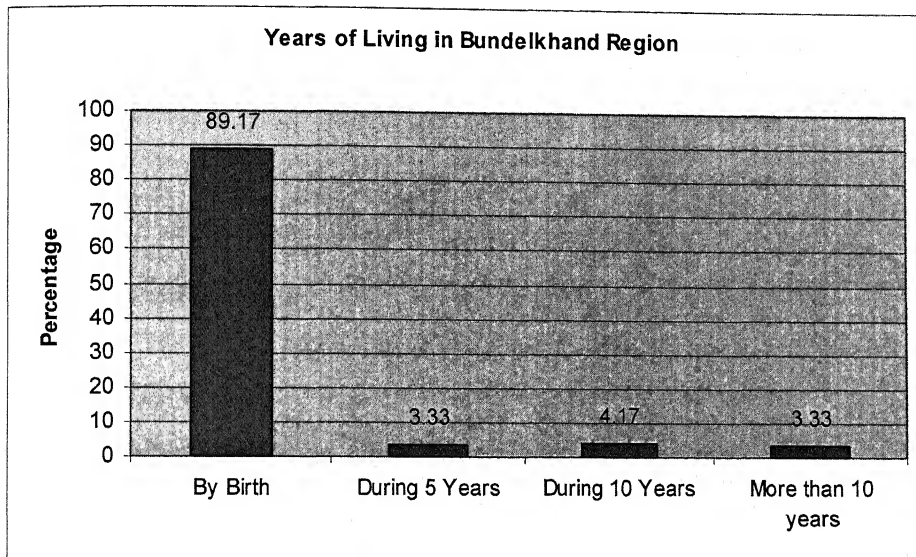
- About the years of living in Bundelkhand Region, the responses of customers obtained are as follows in the table -

Table 6.2: Years of living in Bundelkhand Region

Years	No. of Respondents	Percentage
By Birth	107	89.17
During 5 years	04	3.33
During 10 years	05	4.17
More than 10 years	04	3.33
Total	120	100

Sources: -Primary Data.

From the above, out of 120 respondents, 89.17% of the respondents are permanent residents of Bundelkhand Region, they were living since birth, 3.33% respondents are living during 5 years, and 4.17% of the respondents are living during 10 years, and only 3.33% respondents are living from more than 10 years. This can be shown through the bar diagram 6.6 as follows-



**6.1.7:-Customers of the Bank and their Accounts:** - About the no. of account holders in banks, the responses of customers obtained are as follows in the table 6.3-

Table 6.3: Account holders in banks

Consumers	No. of Respondents	Percentage
Having an accounts	120	100
No accounts	00	00
Total	120	100

Sources: -Primary Data.

It can be concluded from the above table that all the respondents have accounts in a bank. In other words, all the consumers are account holders.

**6.1.8:-Sector wise account holders in banks:** -The respondents had their account in the public and private sector banks so the sector wise responses of the customers are given in the following table-

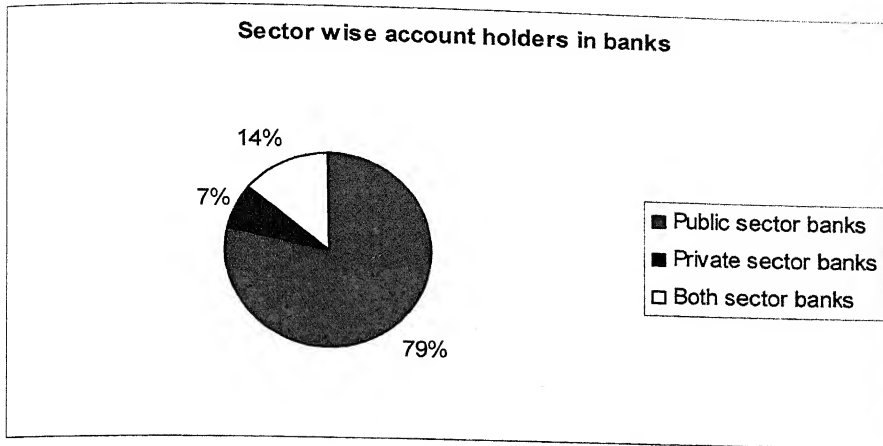
Table 6.4: Sector wise account holders in banks.

Banks	No. of account holders	Percentage
Public sector banks	94	78.33
Private sector banks	09	7.5
Both sector banks	17	14.17
Total	120	100

Sources: -Primary Data.

From the above table, it is clear that majority of the consumer i.e. 78.33% has an account in public sector banks, and only 7.5% of respondents have an account in private sector banks, while 14.17% consumers have account in both sectors banks. This can be shown in Pie chart 6.7 as follows-





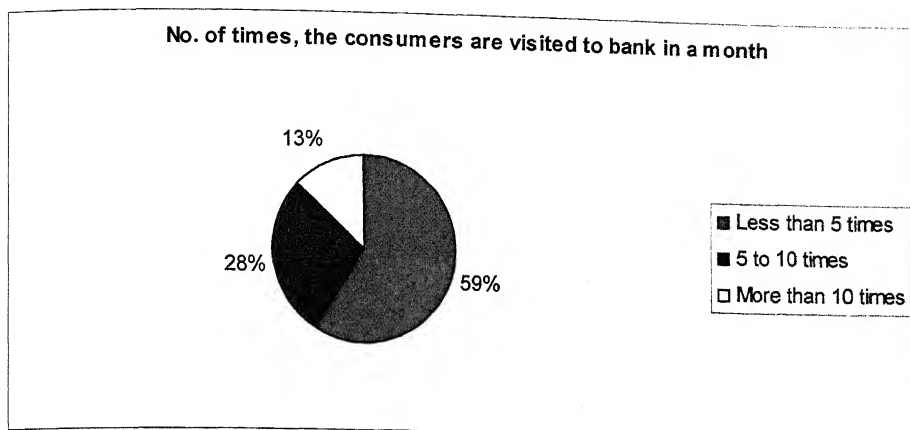
**6.1.9:-Visiting frequencies:** - The consumers are visited to bank many times in a month and their purpose to know about their account and services of E-money, the responses obtained are as follows in the table-

Table 6.5: No. of times, the consumers is visited to bank in a month.

Frequencies	No. of Respondents	Percentage
Less than 5 times	72	60
5 to10 times	33	27.5
More than 10 times	15	12.5
Total	120	100

Sources: -Primary Data.

The table reveals that among 120 respondents, 60% of the respondents have to visit to bank in a month less than 5 times, 27.5% of the respondents have to visit 5 to10 times and 12.5% of the respondents have to visit more than 10 times in a month. These data are shown through the Pie chart 6.8 as follows-



## 6.2:-Data Analysis and Findings of Section (B)-

In section (B), a well structured questionnaire is designed specially to meet the objectives of the E-money services provided by both the public and private sectors banks. It contains 20 questions which show the behavior of consumers towards the service providers of Electronic money. The degree of behavior of consumers on the parameters is quantified by using a 5- point Likert scale. The parameters have been quantified by calculating the percentage tables and bar diagrams.

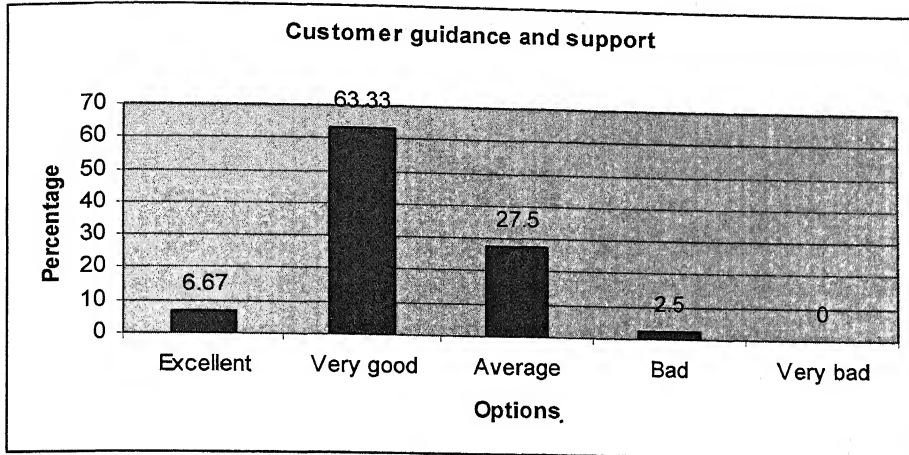
**6.2.1:-Customer guidance and support:** - The customer guidance (Advisory services, clarification of customer doubts), and support provided by the Banks, the responses obtained are as follows in the table-

Table 6.6: Customer guidance (clarification of doubts), and support.

Options	No. of Respondents	Percentage
Excellent	08	6.67
Very good	76	63.33
Average	33	27.5
Bad	03	2.5
Very bad	00	00

Sources: -Primary Data.

It is clear from the above table, among 120 respondents, 63.33% of the respondents rated the services of Customer guidance (clarification of doubts), and support as very good, 27.5% of the respondents gave the rating as average, 6.67% of the respondents rated as excellent, and 2.5% of the respondents rated as bad. These data are shown through the bar diagram 6.9 as follows-



**6.2.2:-Politeness and Hospitality:** - The responses obtained with regard to politeness and hospitality of the service provider of E-money are as follows in the table-

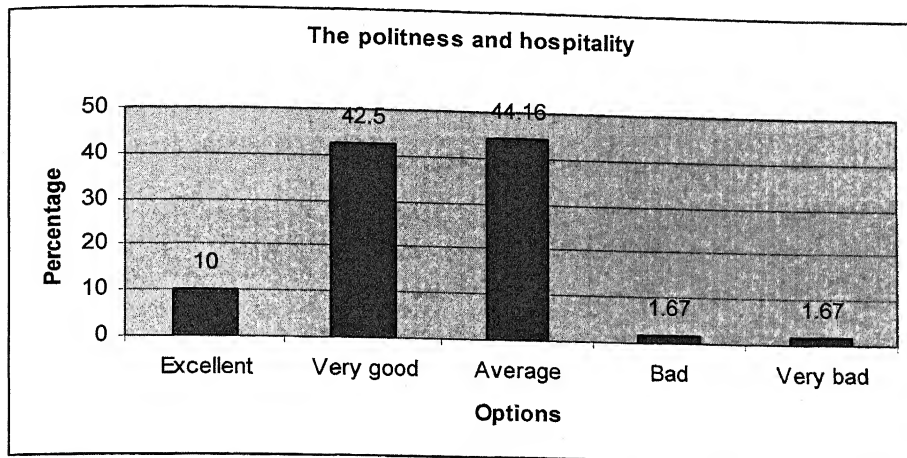
Table 6.7: The politeness and hospitality

Options	No. of Respondents	Percentage
Excellent	12	10
Very good	51	42.5
Average	53	44.16
Bad	02	1.67
Very bad	02	1.67

Sources: -Primary Data.

The table 6.7 shows that 44.16% of the respondents support the politeness and hospitality of the E-money service provider as average, 42.5% supported as very good, 10% of the respondents support for excellent

services, 1.67% respondents supported as bad and equal respondents supported to very bad services of E-money. These data are shown through the bar diagram 6.10 as follows-



**6.2.3:-Handling of customer complaints/Grievances:** -In terms of the handling of customer complaints and grievances, the responses obtained are as follows in the table-

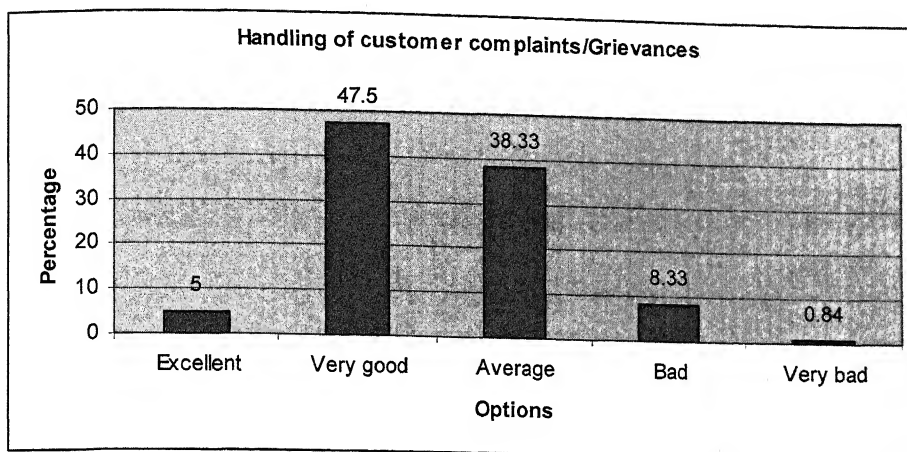
Table 6.8: Handling of customer complaints/Grievances

Options	No. of Respondents	Percentage
Excellent	06	5
Very good	57	47.5
Average	46	38.33
Bad	10	8.33
Very bad	01	0.84

Sources: -Primary Data.

The above table reveals that among the 120 respondents surveyed, 47.5% of the respondents rated the handling of customer complaints/grievances as very good, 38.33% of the respondents rated as average, 8.33% of the respondents rated as bad, 5% of the respondents rated as excellent, and

0.84% of the respondents rated as very bad. These data are shown through the bar diagram 6.11 as follows -



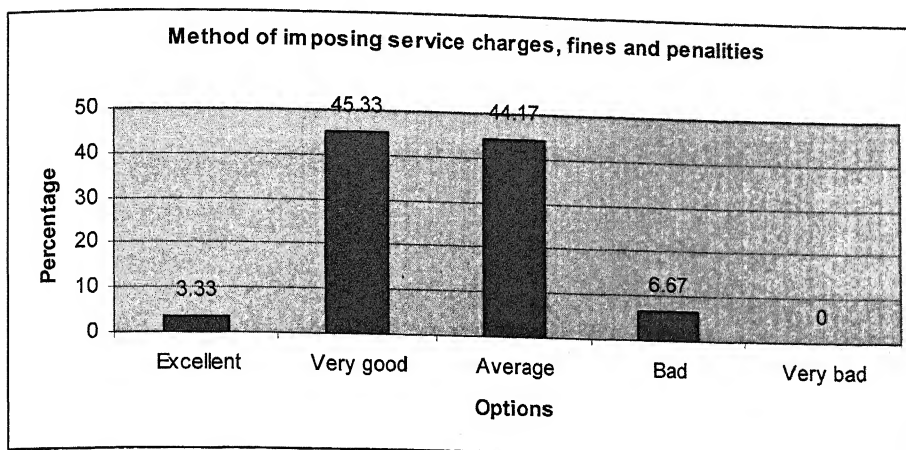
**6.2.4:-Method of imposing service charges, fines and penalties:** - The method of imposing service charges, fines and penalties, the responses obtained are as follows in the table-

Table 6.9: Method of imposing service charges, fines and penalties

Options	No. of Respondents	Percentage
Excellent	04	3.33
Very good	55	45.33
Average	53	44.17
Bad	08	6.67
Very bad	00	00

Sources: -Primary Data

It is observed from the above table that the method of imposing service charges, fines and penalties supported as very good by 45.33% respondents, average by 44.17% respondents, bad by 6.67% respondents, and excellent by 3.33% respondents. These data are shown through the bar diagram 6.12 as follows-



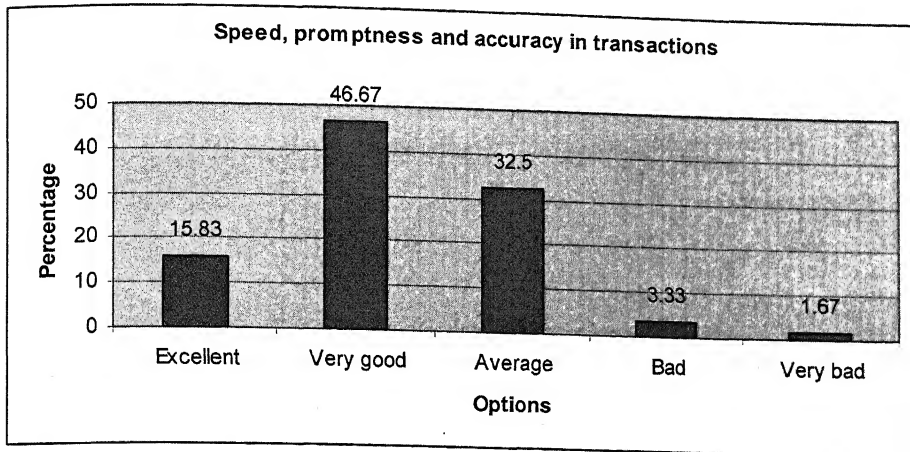
**6.2.5:-Speed, promptness and accuracy in transactions:** - The speed, promptness and accuracy in transactions provided by the banks to their customers, the responses of customers obtained are as follows in the table-

Table 6.10: Speed, promptness and accuracy in transactions

Options	No. of Respondents	Percentage
Excellent	19	15.83
Very good	56	46.67
Average	39	32.5
Bad	04	3.33
Very bad	02	1.67

Sources: -Primary Data

It is seen from the above table that the speed, promptness and accuracy in transactions of E-money services rated as very good by 46.67% of the respondents, as average by 32.5% of the respondents, as excellent by 15.83% of the respondents, as bad by 3.33% of the respondents, and as very bad by 1.67% of the respondents. These data are shown through the bar diagram 6.13 as follows-



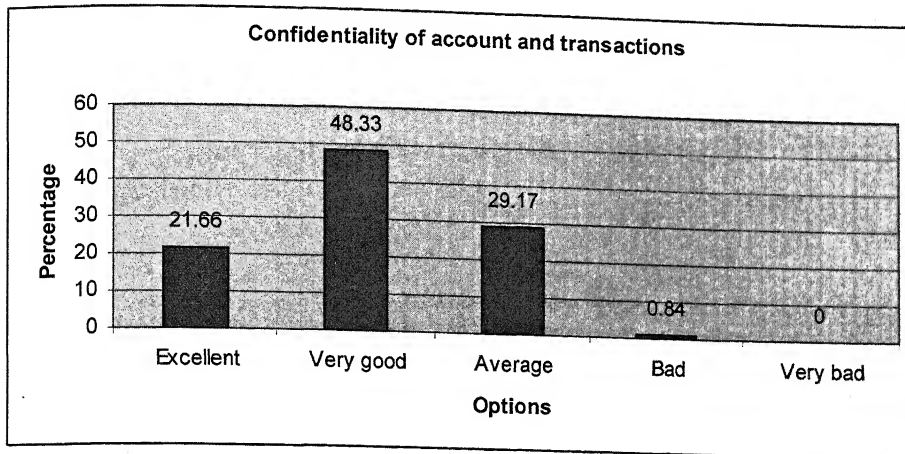
**6.2.6:-Confidentiality of account and transactions:** - The confidentiality of account and transactions provided by the banks to their customers, the responses of customers obtained are as follows in the table-

Table 6.11: Confidentiality of account and transactions

Options	No. of Respondents	Percentage
Excellent	26	21.66
Very good	58	48.33
Average	35	29.17
Bad	01	0.84
Very bad	00	00

Sources: -Primary Data

From the above table, among 120 respondents, 48.33% of the respondents rated the services of Confidentiality of account and transactions as very good, 29.17% of the respondents gave the rating as average, 21.66% of the respondents rated as excellent, and 0.84 % of the respondents rated as bad. These data are shown through the bar diagram 6.14 as follows-



**6.2.7:-Variety of services offered:** - The variety of E-money services offered by the banks to their customers, the responses obtained are as follows in the table-

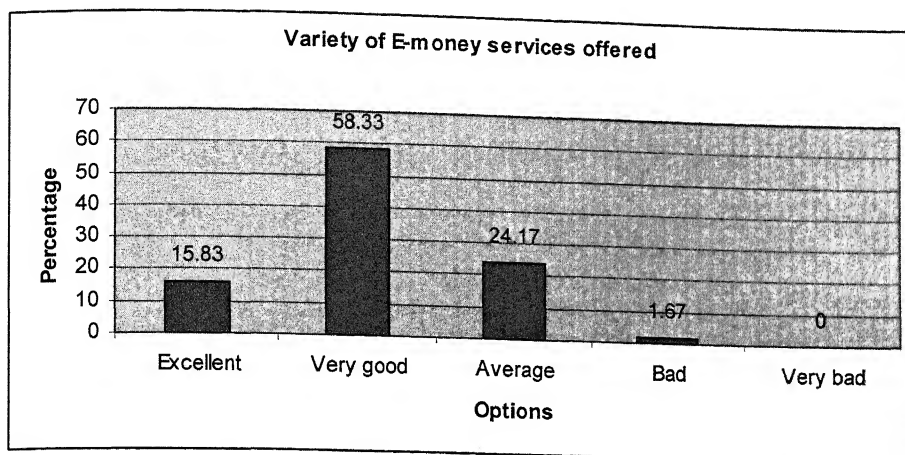
Table 6.12: Variety of services offered

Options	No. of Respondents	Percentage
Excellent	19	15.83
Very good	70	58.33
Average	29	24.17
Bad	02	1.67
Very bad	00	00

Sources: -Primary Data

It is inferred that 58.33% of the respondents support the Variety of services of the E-money offered by the service provider as very good, 24.17% of the respondents supported as average, 15.83% supported as excellent, and 1.67% respondents supported as bad. These data are shown through the bar diagram 6.15 as follows -





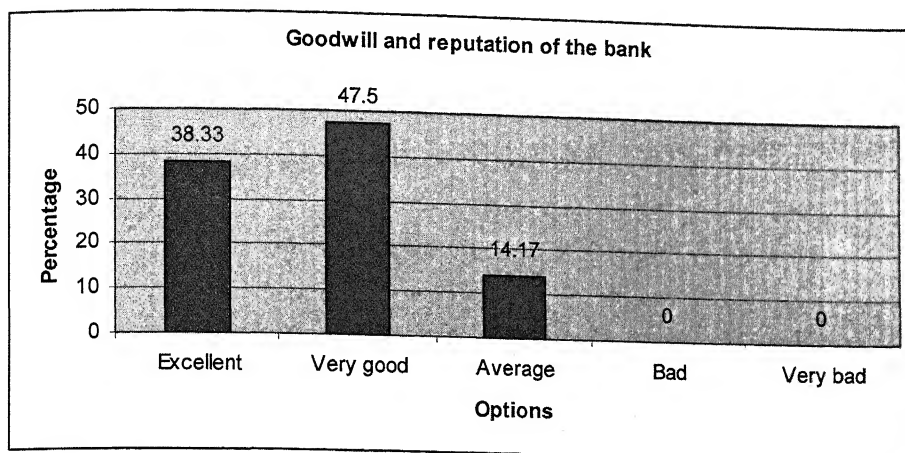
**6.2.8:-Goodwill and reputation of the bank:** -The goodwill and reputation of the bank, the responses obtained are as follows in the table-

Table 6.13: Goodwill and reputation of the bank

Options	No. of Respondents	Percentage
Excellent	46	38.33
Very good	57	47.5
Average	17	14.17
Bad	00	00
Very bad	00	00

Sources: -Primary Data

The above table reveals that among the 120 respondents surveyed, 47.5% of the respondents rated the goodwill and reputation of the bank as very good, 38.33% of the respondents rated as excellent, and 14.17% of the respondents rated as bad. These data are shown through the bar diagram 6.16 as follows -



#### **6.2.9:-Infrastructure facilities like E-payment, ATM, Credit card etc:**

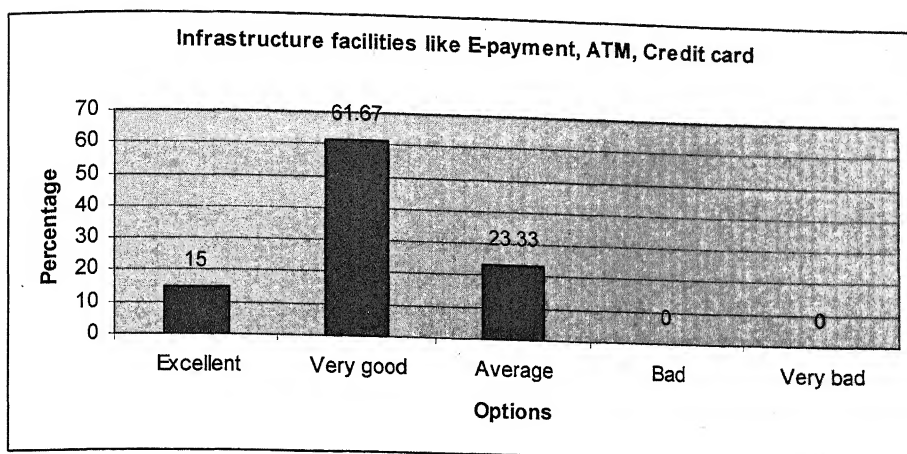
- The infrastructure facilities like E-payment, ATM, Credit card etc provided by the banks to their customers, the responses of customers obtained are as follows in the table-

Table 6.14: The infrastructure facilities like E-payment, ATM, Credit card etc

Options	No. of Respondents	Percentage
Excellent	18	15
Very good	74	61.67
Average	28	23.33
Bad	00	00
Very bad	00	00

Sources: -Primary Data

It is observed from the above table that the infrastructure facilities like E-payment, ATM, Credit card etc supported as very good by 61.67% respondents, average by 23.33% respondents, and excellent by 15% respondents. These data are shown through the bar diagram 6.17 as follows-



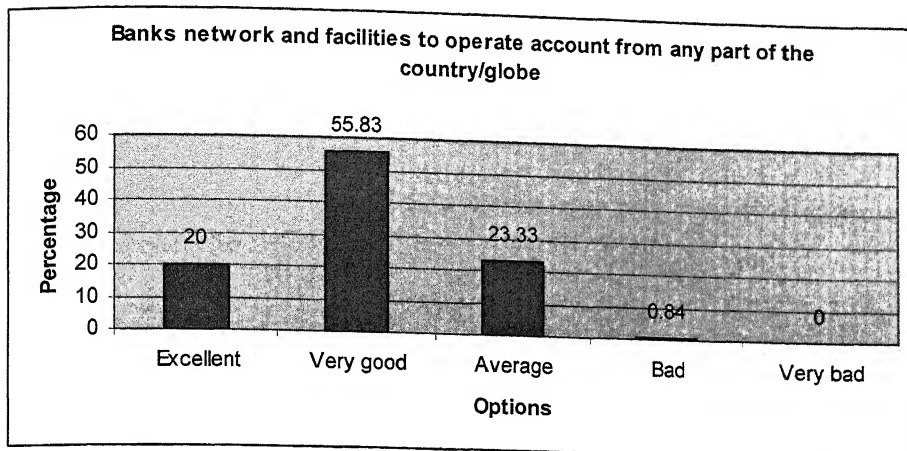
**6.2.10:-Banks network and facilities:** - The services of banks network and facilities to operate account from any part of the country/globe the customers, the responses of customers obtained are as follows in the table-

Table 6.15: Banks network and facilities to operate account from any part of the country/globe

Options	No. of Respondents	Percentage
Excellent	24	20
Very good	67	55.83
Average	28	23.33
Bad	01	0.84
Very bad	00	00

Sources: -Primary Data

It is seen from the above table that the banks network and facilities to operate account from any part of the country/globe of E-money services rated as very good by 55.83% of the respondents, as average by 23.33% of the respondents, as excellent by 20% of the respondents, and as bad by 0.84% of the respondents. These data are shown through the bar diagram 6.18 as follows -



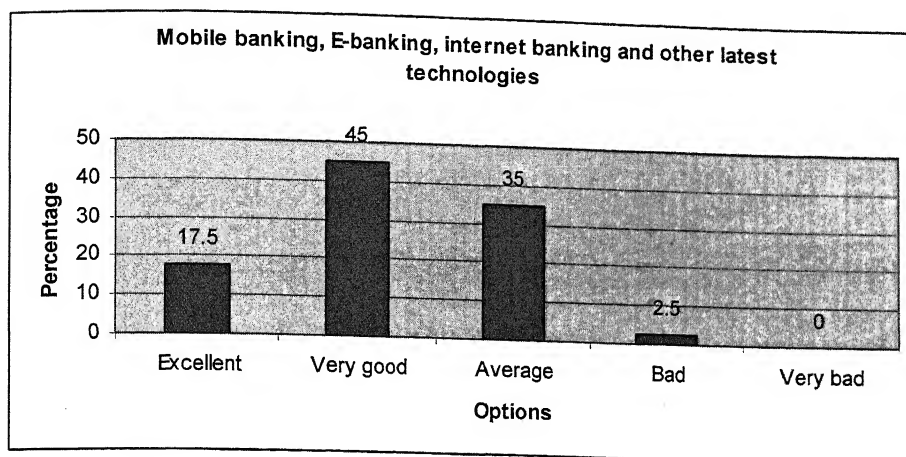
**6.2.11:-Mobile banking, E-banking, internet banking and other latest technologies:** - Mobile banking, E-banking, internet banking and other latest technologies offered by the banks to their customers, the responses obtained are as follows in the table-

Table 6.16: Mobile banking, E-banking, internet banking and other latest technologies

Options	No. of Respondents	Percentage
Excellent	21	17.5
Very good	54	45
Average	42	35
Bad	03	2.5
Very bad	00	00

Sources: -Primary Data

From the above table, among 120 respondents, 45% of the respondents rated mobile banking, E-banking, internet banking and other latest technologies as very good, 35% of the respondents gave the rating as average, 17.5% of the respondents rated as excellent, and 2.5 % of the respondents rated as bad. These data are shown through the bar diagram 6.19 as follows -



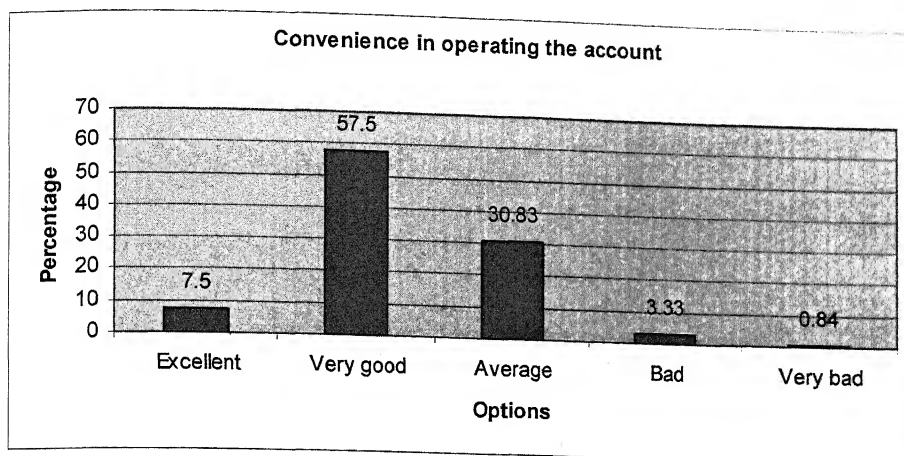
**6.2.12:-Convenience in Operating the Account:** -The convenience in operating the account of the bank, the responses obtained are as follows in the table-

Table 6.17: Convenience in operating the account

Options	No. of Respondents	Percentage
Excellent	09	7.5
Very good	69	57.5
Average	37	30.83
Bad	04	3.33
Very bad	01	0.84

Sources: -Primary Data

It is inferred that 57.5% of the respondents found the convenience in operating the account as very good, 30.83% of the respondents found as average, 7.5% found as excellent, 3.33% respondents found as bad, and 0.84% of the respondents found as very bad. These data are shown through the bar diagram 6.20 as follows -



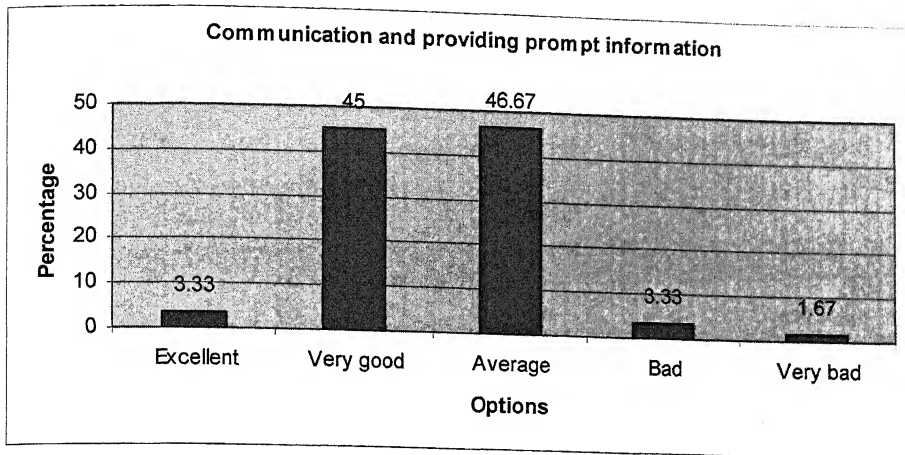
**6.2.13:-Communication and providing prompt information:** - The communication and providing prompt information about any queries of E-money services of the bank, the responses obtained are as follows in the table-

Table 6.18: Communication and providing prompt information (regarding customer account, Settlement of dues, availability of new services etc)

Options	No. of Respondents	Percentage
Excellent	04	3.33
Very good	54	45
Average	56	46.67
Bad	04	3.33
Very bad	02	1.67

Sources: -Primary Data

The above table reveals that among the 120 respondents surveyed, 46.67% of the respondents rated the Communication and providing prompt information (regarding customer account, Settlement of dues, availability of new services etc) of the bank as average, 45% of the respondents rated very good, 3.33% of the respondents rated as excellent and same rated to bad, and 1.67% of the respondents rated as very bad. These data are shown through the bar diagram 6.21 as follows -



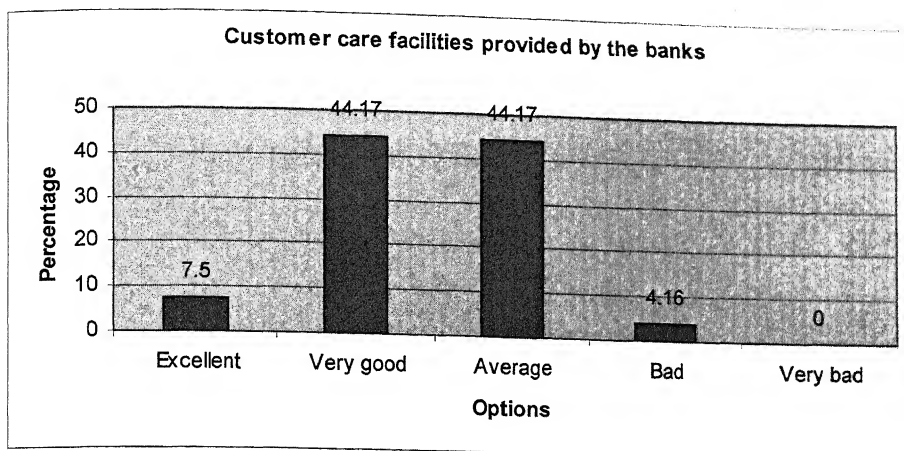
**6.2.14:-Customer care facilities provided by the service provider:** -The customer care facilities provided by the service provider to their customers, the responses obtained are as follows in the table-

Table 6.19: Customer care facilities provided by the service provider

Options	No. of Respondents	Percentage
Excellent	09	7.5
Very good	53	44.17
Average	53	44.17
Bad	05	4.16
Very bad	00	00

Sources: -Primary Data

It is observed from the above table that the customer care facilities provided by the service provider found as very good and average same by 44.17% respondents, found excellent by 7.5% respondents, and found bad by 4.16% respondents. These data are shown through the bar diagram 6.22 as follows -



**6.2.15:-An E-money transaction more convenient than physical money transactions:** - E-money transactions are more convenient than physical money transactions, the responses of customers obtained are as follows in the table-

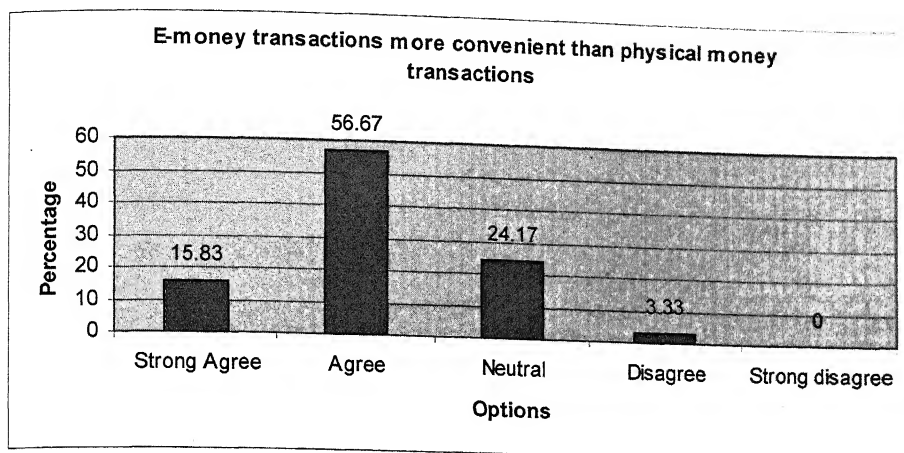
Table 6.20: E-money transactions more convenient than physical money transactions

Options	No. of Respondents	Percentage
Strong Agree	19	15.83
Agree	68	56.67
Neutral	29	24.17
Disagree	04	3.33
Strong disagree	00	00

Sources: -Primary Data

From the response it can be observed that 56.67% of the total users are agreed that E-money transactions more convenient than physical money transactions, 24.17% of the users seem to be neutral, 15.83% of the users strong agreed, and 3.33% of the users seem to be Disagree. These data are shown through the bar diagram 6.23 as follows -





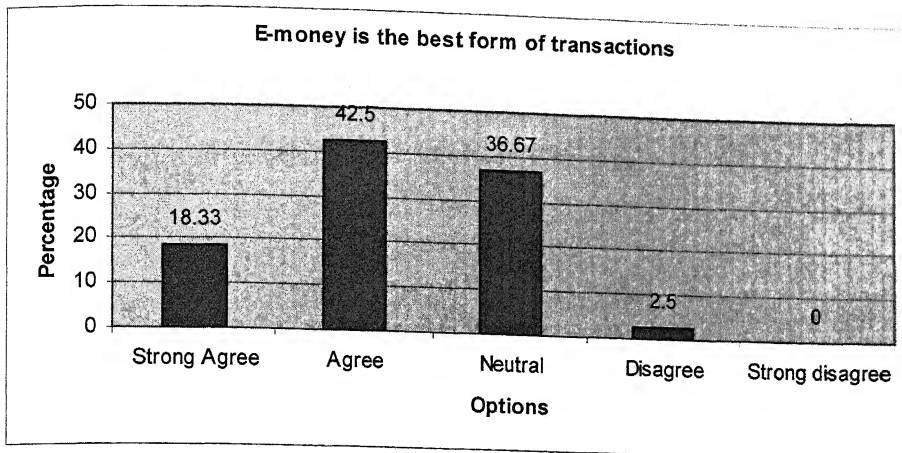
**6.2.16:-E-money is the best form of transactions:** -E-money is the best forms of transactions, the responses of customers obtained are as follows in the table-

Table 6.21: E-money is the best form of transactions

Options	No. of Respondents	Percentage
Strong Agree	22	18.33
Agree	51	42.5
Neutral	44	36.67
Disagree	03	2.5
Strong disagree	00	00

Sources: -Primary Data

It is clear that more than 60% of the consumers are agreed that E-money is the best form of transactions while 2.5% of them are disagreed. 36.67% of the respondents remain neutral. These data are shown through the bar diagram 6.24 as follows -



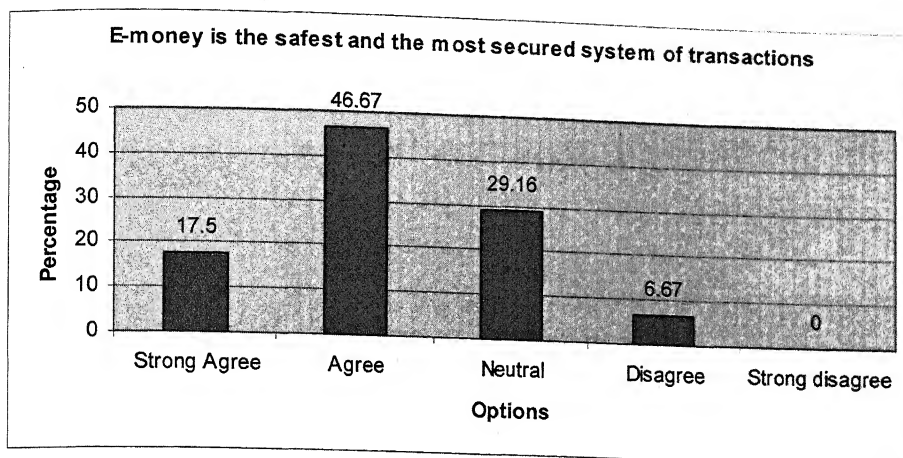
**6.2.17:-E-money is the safest and the most secured system of transactions:** - The E-money is the safest and the most secured system of transactions; the responses of customers obtained regarding the above statement is as follows in the table-

Table 6.22: E-money is the safest and the most secured system of transactions

Options	No. of Respondents	Percentage
Strong Agree	21	17.5
Agree	56	46.67
Neutral	35	29.16
Disagree	08	6.67
Strong disagree	00	00

Sources: -Primary Data

The table reveals that the satisfaction level with regard to E-money is the safest and the most secured system of transactions is more than 63%. 29.16% of the respondents seem to be neutral while 6.67% of the respondents are disagreed. These data are shown through the bar diagram 6.25 as follows -



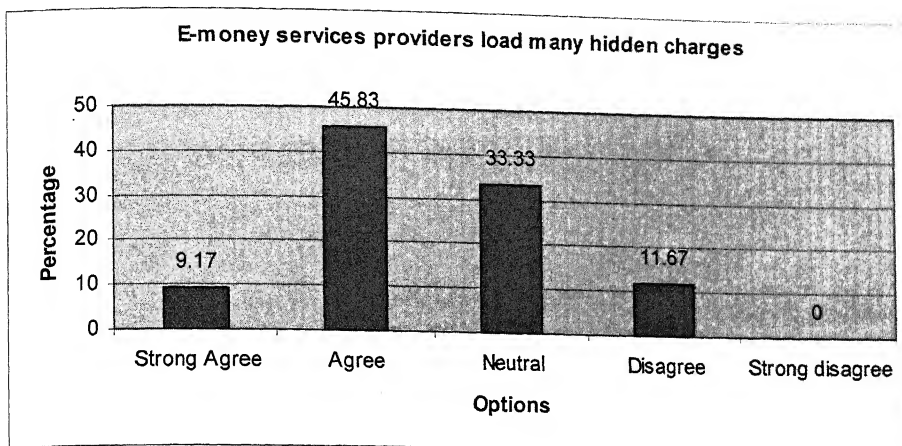
**6.2.18:-E-money service provider load many hidden charges:** - E-money service provider load many hidden charges on their customers, the responses obtained are as follows in the table-

Table 6.23: E-money service provider load many hidden charges

Options	No. of Respondents	Percentage
Strong Agree	11	9.17
Agree	55	45.83
Neutral	40	33.33
Disagree	14	11.67
Strong disagree	00	00

Sources: -Primary Data

From the response it can be observed that 45.83% of the total users are agreed that E-money service provider load many hidden charges, 33.33% of the users seem to be neutral about hidden charges, 11.67% of the users disagreed, and 9.17% of the users seem to be strong agreed. These data are shown through the bar diagram 6.26 as follows -



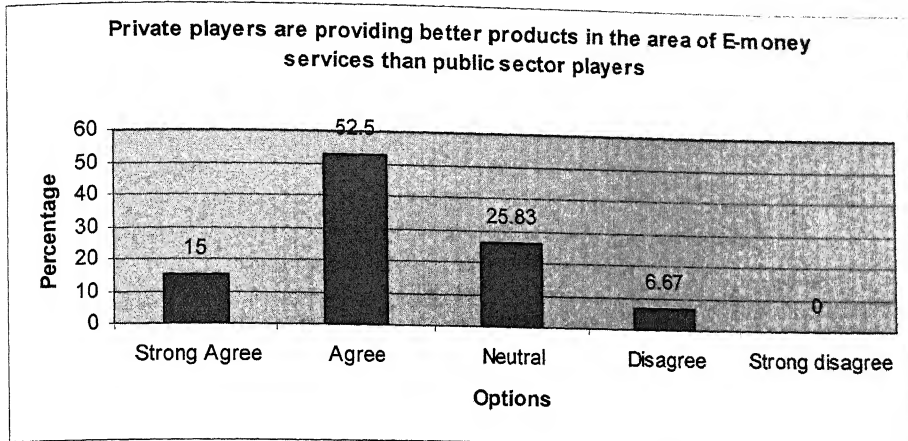
**6.2.19:-Private players are providing better products in the area of E-money services than Public sector players:** - The private players are providing better products in the area of E-money services than Public sector players, the responses obtained are as follows in the table-

Table 6.24: Private players are providing better products in the area of E-money services than Public sector players

Options	No. of Respondents	Percentage
Strong Agree	18	15
Agree	63	52.5
Neutral	31	25.83
Disagree	08	6.67
Strong disagree	00	00

Sources: -Primary Data

From the above table it is cleared that more than 67% of the consumers are agreed that Private players are providing better products in the area of E-money services than Public sector players while 6.67% of them are disagreed. 25.83% of the respondents remain neutral. These data are shown through the bar diagram 6.27 as follows -



**6.2.20:-Anytime, anywhere, the services of E-money can be used: -**

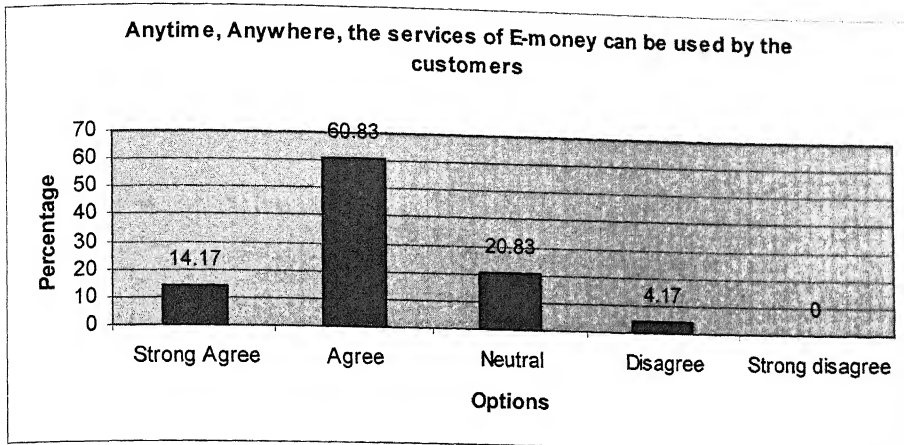
Regarding Anytime, Anywhere, the services of E-money can be used by the customers; the responses obtained are as follows in the table-

Table 6.25: Anytime, Anywhere, the services of E-money can be used.

Options	No. of Respondents	Percentage
Strong Agree	17	14.17
Agree	73	60.83
Neutral	25	20.83
Disagree	05	4.17
Strong disagree	00	00

Sources: -Primary Data

The table reveals that the satisfaction level with regard to Anytime, Anywhere, the services of E-money can be used is more than 70%. 20.83% of the respondents seem to be neutral while 4.17% of the respondents are disagreed. These data are shown through the bar diagram 6.28 as follows -



### **6.3:-Data Analysis and Findings of Section (C):-**

In section (C), a structured questionnaire is designed specially to meet the objectives of the E-money services provided by the service providers. It contains 24 questions which show the consumers expectation level, motivation, satisfaction, and the positive and negative impact of random technological changes towards the service providers of Electronic money. The collected data have been analyzed with the help of the simple statistical tools like the percentage, Pie charts, and bar diagrams. Findings of the study have been given with the help of following tables and diagrams.

#### **6.3.1:-Awareness about Internet banking, Electronic money and**

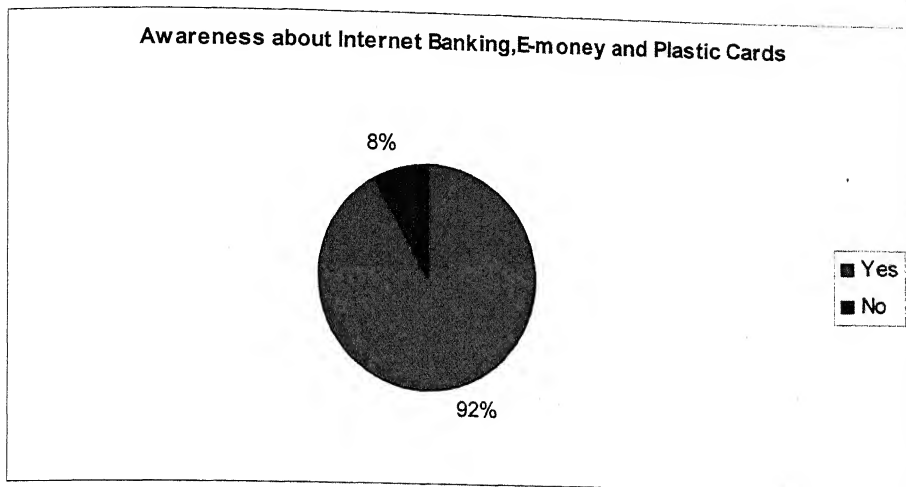
**Plastic cards:** - The awareness about internet banking, electronic money and plastic cards, the responses of customers obtained are as follows in the table-

Table 6.26: Awareness about Internet banking, Electronic money and Plastic cards.

Consumer awareness	No. of Respondents	Percentage
Yes	110	91.67
No	10	8.33
Total	120	100

Sources: -Primary Data.

From the above table, it is evident that 91.67% of the consumers are aware about Internet banking, Electronic money and Plastic cards while 8.33% of the consumers are not aware about it. These data are shown through the Pie chart 6.29 as follows -



**6.3.2:-Types of E-money used by the consumers:** -The various types of E-money used by the consumers, the responses obtained are as follows in the table-

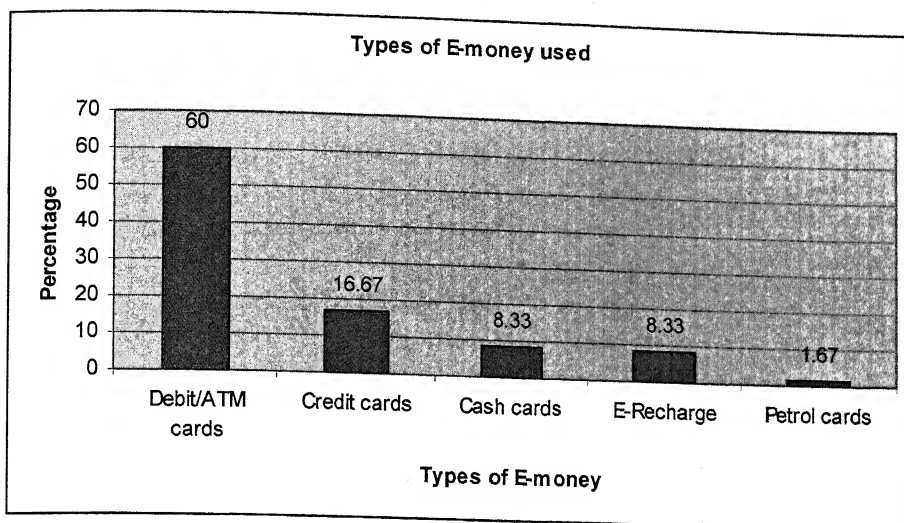
Table 6.27: Types of E-money used by the consumers.

Types of E-money	No. of Respondents	Percentage
Debit cards/ATM cards	72	60
Credit cards	20	16.67
Cash cards	10	8.33
E-Recharge	10	8.33
Petrol cards	02	1.67

Sources: -Primary Data.

The majority of the respondents (60%) preferred that Debit cards/ATM cards are the main types of the E-money, Credit cards preferred by 16.67% of the respondents, 8.33% of the respondents preferred cash cards and E-

recharge, and 1.67% preferred the petrol cards. These data are shown through the bar diagram 6.30 as follows -



**6.3.3:-Factors that motivated to consumers for using E-money:** -The factors that motivated to consumers for using E-money, the responses of customers obtained are as follows in the table-

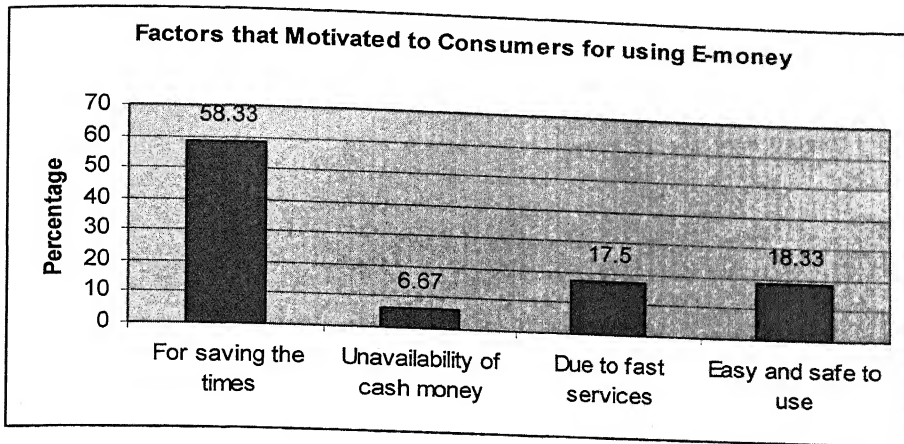
Table 6.28: Factors that motivated to consumers for using E-money.

Types of E-money	No. of Respondents	Percentage
For saving the time	73	58.33
Unavailability of cash money	08	6.67
Due to fast services	21	17.5
Easy and safe to use	22	18.33

Sources: -Primary Data.

It is inferred that from the above table 58.33% of the respondents using the E-money for saving the time, 18.33% using for easy and safe, 17.5% using due to fast services, and rests 6.67% of the respondents using due to unavailability of cash money. These data are shown through the bar diagram 6.31 as follows -





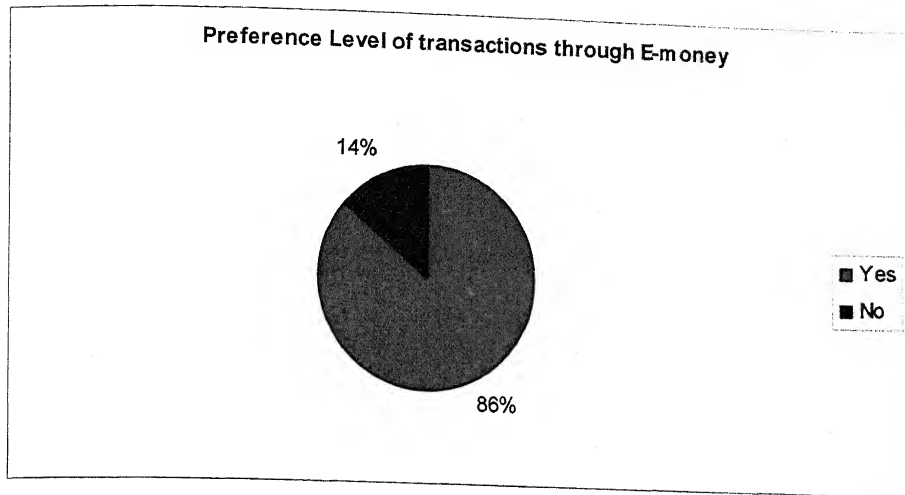
**6.3.4:-Preference Level of transactions through E-money:** - The preference level of transactions through E-money used by the consumers, the responses obtained are as follows in the table-

Table 6.29: Preference Level of transactions through E-money.

Prefer transactions	No. of Respondents	Percentage
Yes	103	85.83
No	17	14.17
Total	120	100

Sources: -Primary Data.

It is seen from the above table that more than 85% of the respondents preferred the transactions through E-money while less than 15% are not preferred the transactions through E-money. These data are shown through the Pie chart 6.32 as follows -



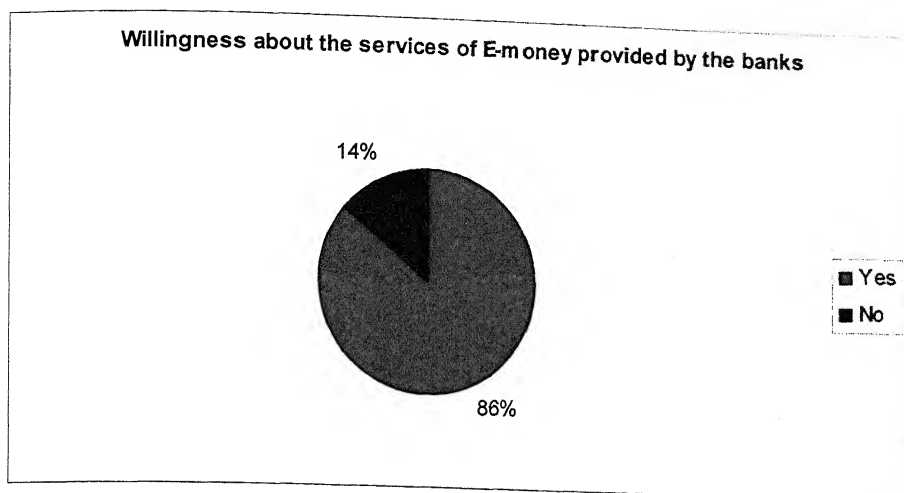
**6.3.5:-Willingness about the services of E-money provided by the banks:** -The willingness about the services of E-money provided by the banks, the responses of customers obtained are as follows in the table-

Table 6.30: Willingness about the services of E-money provided by the banks.

Options	No. of Respondents	Percentage
Yes	109	90.83
No	11	9.17
Total	120	100

Sources: -Primary Data.

The above table reveals that more than 90% of the respondents are desired to know about the services of E-money provided by the banks and less than 10% are not interested. These data are shown through the Pie chart 6.33 as follows -



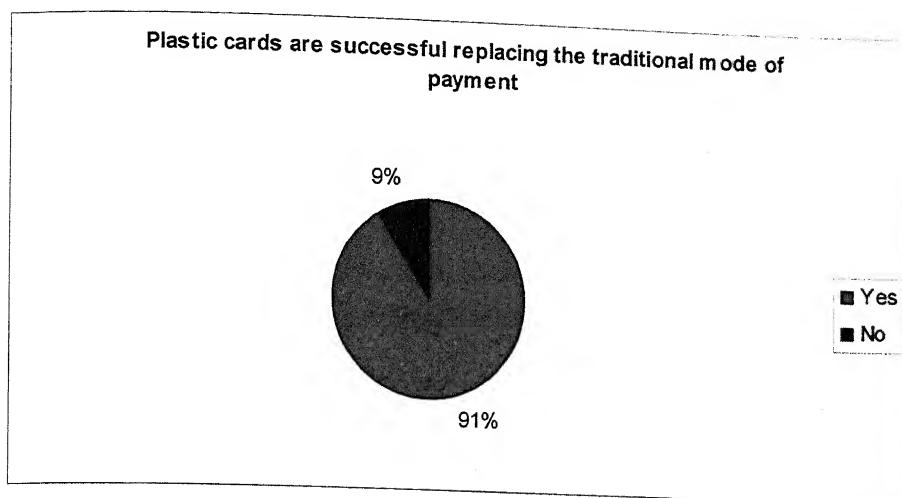
**6.3.6:-Plastic cards are successful replacing the traditional mode of payments:** -The comparison of the payment through plastic cards and the payment through the traditional mode, the responses obtained are as follows in the table-

Table 6.31: Plastic cards are successful replacing the traditional mode of payments.

Options	No. of Respondents	Percentage
Yes	109	90.83
No	11	9.17
Total	120	100

Sources: -Primary Data.

It is evident from the above table, more than 90% of the respondents said that Plastic cards are successful replacing the traditional mode of payments while rests are neutral. These data are shown through the Pie chart 6.34 as follows -



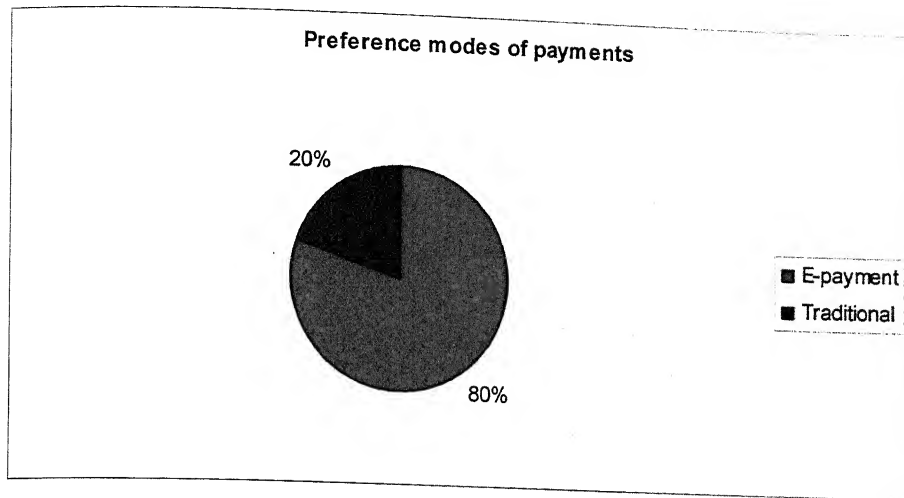
**6.3.7:-Preference modes of payments:** -The preference modes of payments, the responses of customers obtained are as follows in the table-

Table 6.32: Preference modes of payments.

Modes of payments.	No. of Respondents	Percentage
E-payment	96	80
Traditional	24	20
Total	120	100

Sources: -Primary Data.

It can be observed from the table that 80% of the respondents prefer the mode of the transaction through E-payment, and 20% of the respondents prefer through traditional. These data are shown through the Pie chart 6.35 as follows -



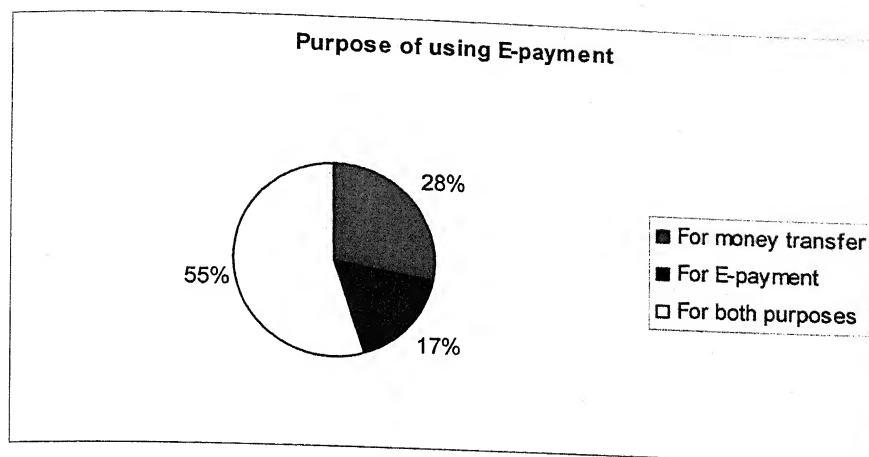
**6.3.8:-Various purpose of using E-money:** -The various purpose of using E-money used by the consumers, the responses obtained are as follows in the table-

Table 6.33: Various purpose of using E-money.

Various purposes	No. of Respondents	Percentage
For money transfer	34	28.33
For E-payment	20	16.67
Both of the above	66	55

Sources: -Primary Data.

Among the 120 consumers, 55% are using E-money for both many transfer and E-payment, 28.33% are using only for money transfer, and rests 16.67% are using for E-payment. These data are shown through the Pie chart 6.36 as follows -



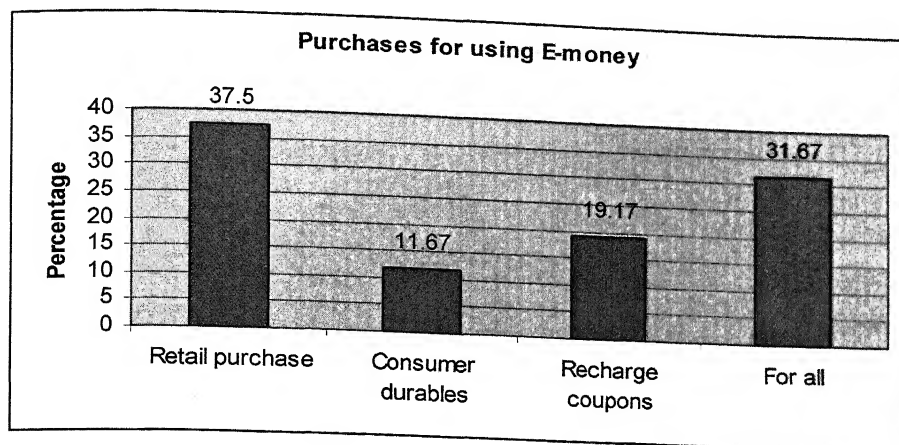
**6.3.9:-Purpose of using E-payment:** - The various purpose of using E-money used by the consumers, the responses obtained are as follows in the table-

Table 6.34: Purpose of using E-payment.

Various purposes	No. of Respondents	Percentage
Retail purchase	45	37.5
Consumer durables	14	11.67
Recharge coupons	23	19.17
All of the above	38	31.67

Sources: -Primary Data.

Among the 120 respondents, 37.5% of the respondents using E-payment for retail purpose, 19.17% for recharge coupons, 11.67% for consumers durable, and 31.67% are using all these. These data are shown through the bar diagram 6.37 as follows -



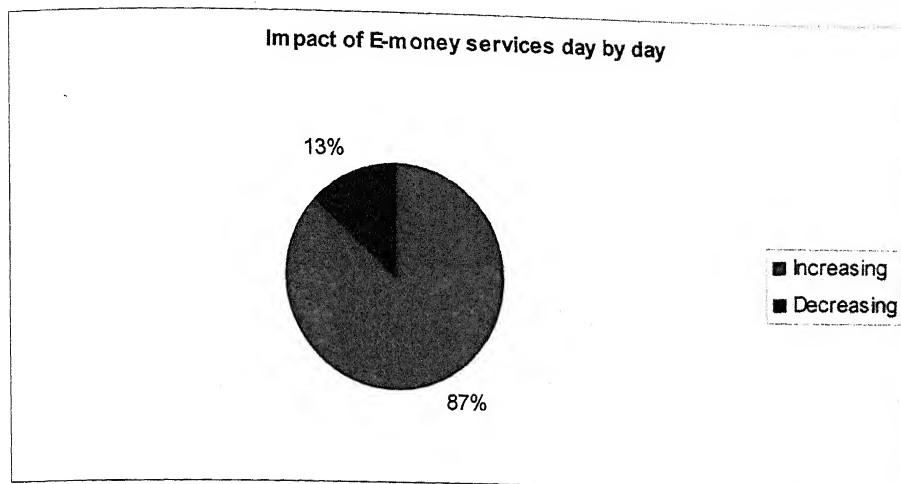
**6.3.10:-Impact of Electronic Money services day by day:** - The positive and negative impact of Electronic Money services day by day, the responses obtained are as follows in the table-

Table 6.35: Impact of Electronic Money services day by day.

Impact of E-money	No. of Respondents	Percentage
Increasing	105	87.5
Decreasing	15	12.5
Total	120	100

Sources: -Primary Data.

It is evident from the above table, the impact of Electronic Money services are increasing day by day supported by 87.5% of the respondents while 12.5% of the respondents thought it is decreasing. These data are shown through the Pie chart 6.38 as follows -



**6.3.11:-Usages ATM cards for inter-bank transaction:** -The usages of ATM cards for inter-bank transaction, the responses of customers obtained are as follows in the table-

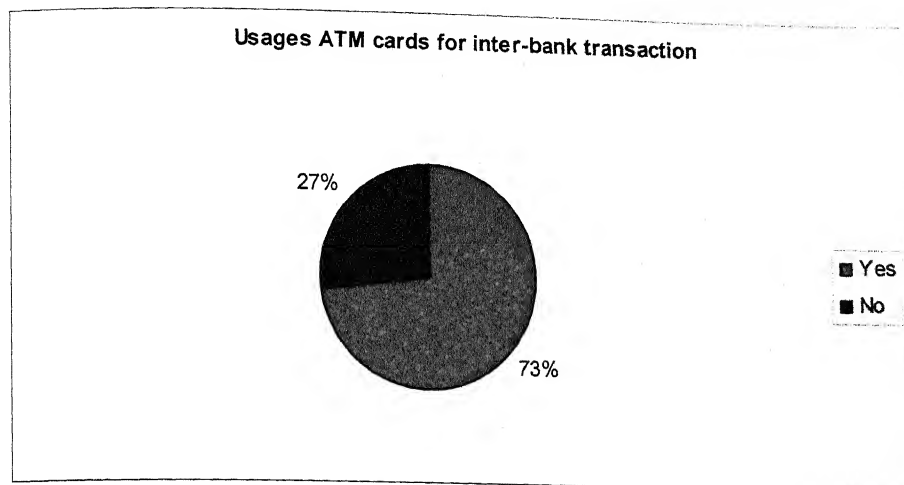
Table 6.36: Usages ATM cards for inter-bank transaction.

Options	No. of Respondents	Percentage
Yes	88	73.33
No	32	26.67
Total	120	100

Sources: -Primary Data.

It can be observed from the table that 73.33% of the respondents are using ATM cards for inter-bank transaction, and 26.67% of the respondents are not. These data are shown through the Pie chart 6.39 as follows -





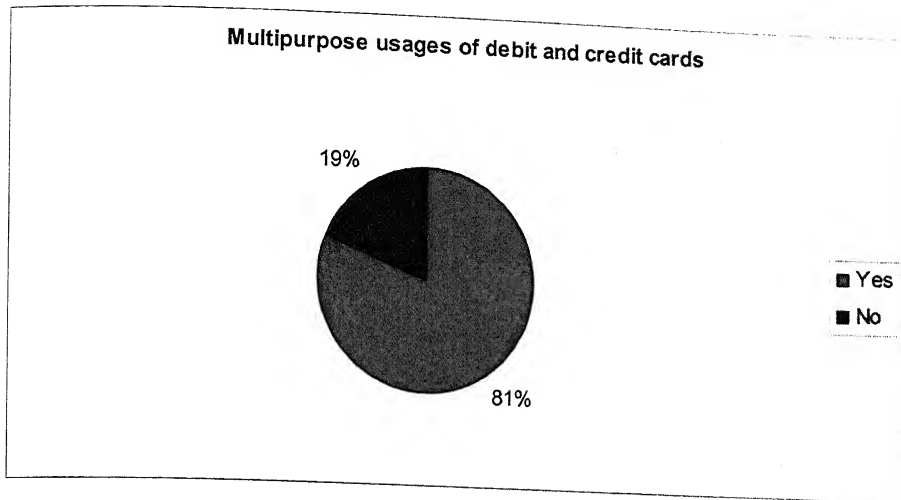
**6.3.12:-Multipurpose usages of Debit and Credit cards:** -The multipurpose usages of debit and credit cards by the consumers, the responses obtained are as follows in the table-

Table 6.37: Multipurpose usages of Debit and Credit cards.

Options	No. of Respondents	Percentage
Yes	97	80.33
No	23	19.17
Total	120	100

Sources: -Primary Data.

The above table reveals that 80.33% consumers are using Debit and Credit cards for multipurpose and 19.17% consumers are using single purpose. These data are shown through the Pie chart 6.40 as follows -



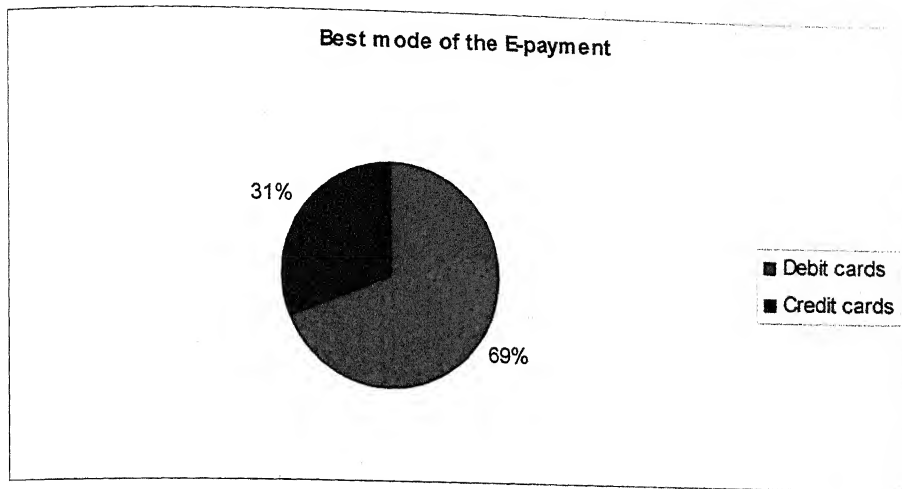
**6.3.13:-Best mode of the E-payment:** - The comparison of the payment through debit cards and the payment through credit cards, the responses obtained are as follows in the table-

Table 6.38: Best mode of the E-payment.

Cards	No. of Respondents	Percentage
Debit Cards	83	69.17
Credit Cards	37	30.83
Total	120	100

Sources: -Primary Data.

From the above data among the 120 respondents, 69.17% of the respondents accept that debit cards are the best mode of the E-payment while 30.83% agree for credit cards. These data are shown through the Pie chart 6.41 as follows -



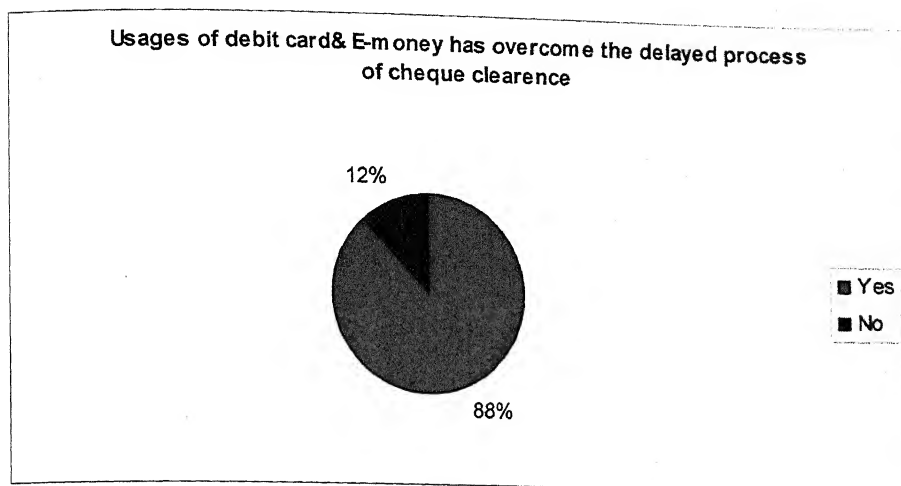
**6.3.14:-Usages of debit card& E-money has overcome the delayed process of cheque clearance:** - The positive and negative impact of using debit cards and E-money on the process of cheque clearance, the responses obtained are as follows in the table-

Table 6.39: Usages of debit card& E-money has overcome the delayed process of cheque clearance.

Options	No. of Respondents	Percentage
Yes	106	88.33
No	14	11.67
Total	120	100

Sources: -Primary Data.

It is evident from the above table, 88.33% of the respondents said that the usages of debit card and E-money have overcome the delayed process of cheque clearance and rests of the respondents are not agreed. These data are shown through the Pie chart 6.42 as follows -



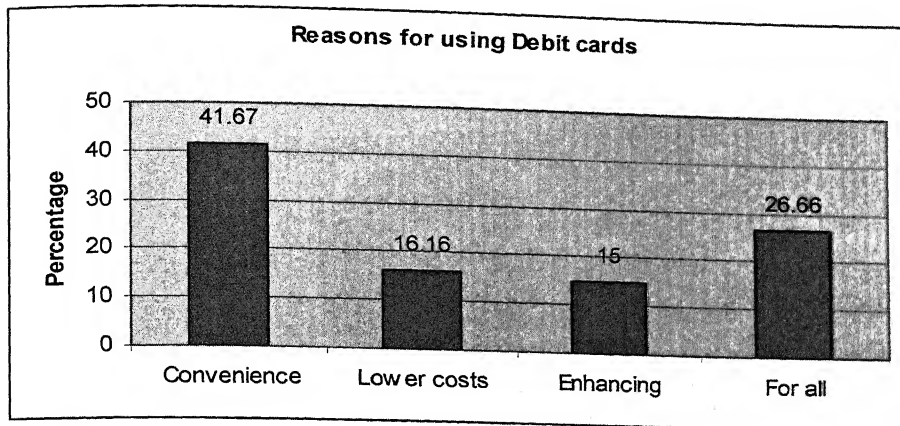
**6.3.15:-Usages of the debit card have facilitated:** -The reasons for using the facilities of debit cards by the consumers, the responses obtained are as follows in the table-

Table 6.40: Usages of the debit card have facilitated.

Facilities	No. of Respondents	Percentage
Convenience	50	41.67
Lower cost	20	16.67
Enhancing	18	15
All the above	32	26.66

Sources: -Primary Data.

The above table reveals that 41.67% of the respondents are using debit cards for convenience, 16.67% for lower cost, 15% for enhancing, and 26.66% of the respondents are debit cards for all these. These data are shown through the bar diagram 6.43 as follows -



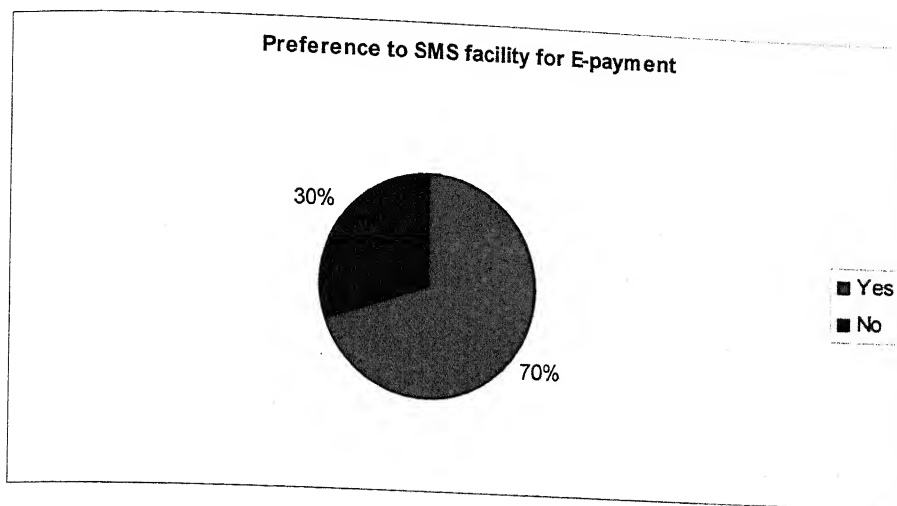
**6.3.16:-Preference to SMS facility for E-payment:** -The preference to SMS facility for E-payment, the responses of customers obtained are as follows in the table-

Table 6.41: Preference to SMS facility for E-payment.

Preference Level	No. of Respondents	Percentage
Yes	84	70
No	36	30
Total	120	100

Sources: -Primary Data.

It is cleared that among the 120 respondents, 70% of the respondents preferred SMS facility for E-payment, and others are not. These data are shown through the Pie chart 6.44 as follows -



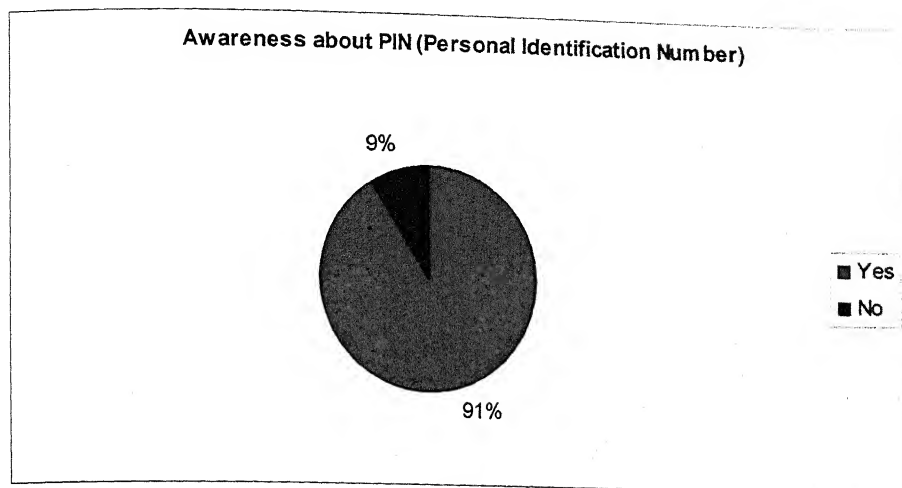
**6.3.17:-Awareness about PIN:** - The awareness about PIN (Personal Identification Number), the responses obtained are as follows in the table-

Table 6.42: Awareness about PIN (Personal Identification Number).

Awareness Level	No. of Respondents	Percentage
Yes	109	90.83
No	11	9.17
Total	120	100

Sources: -Primary Data.

It is evident from the above table, almost 90.83% of the respondents are aware about PIN (Personal Identification Number) while rests are not aware. These data are shown through the Pie chart 6.45 as follows -



**6.3.18:-Various services of E-money:** - The various services of E-money used by the consumers, the responses obtained are as follows in the table-

Table 6.43: Various services of E-money.

Options	No. of Respondents	%age
Shopping	45	37.5
Fund transfer	10	8.33
Demand draft	07	5.83
Payment for different kinds of services	10	8.33
Others	10	8.33
All the above	42	35

Sources: -Primary Data.

The above table reveals that 37.5% of the respondents are using the E-money for shopping, 8.33% of the respondents are using in fund transfer and payment for different kinds of services and others, 5.83% for demand draft, and 35% are using for all these.

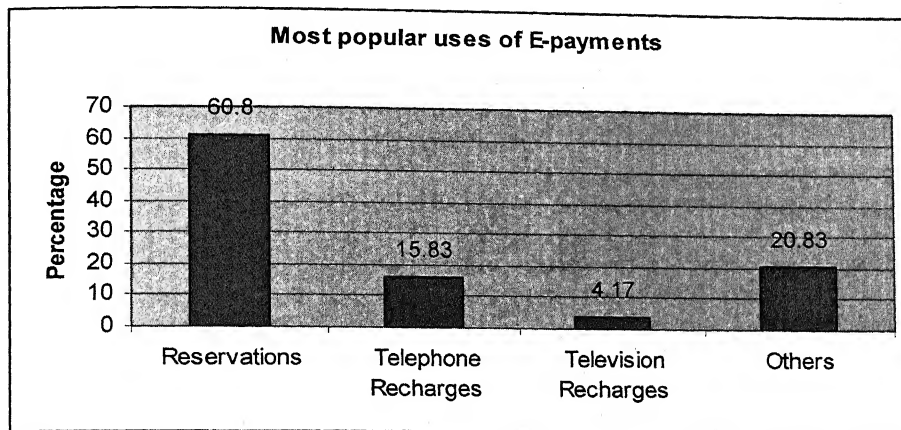
**6.3.19:-Most popular uses of E-payments:** -The most popular uses of E-payments, the responses of customers obtained are as follows in the table-

Table 6.44: Most popular uses of E-payments.

Various uses	No. of Respondents	Percentage
Reservations	73	60.8
Telephone Recharges	19	15.83
Television Recharges	05	4.17
Others	25	20.83

Sources: -Primary Data.

The above table reveals that 60.8% of the respondents are using the E-payment for reservations, 20.83% of the respondents are using in different areas, 15.83% for telephone recharges, and rests 4.17% are using for television recharges. These data are shown through the bar diagram 6.46 as follows -



**6.3.20:-Satisfaction Level with the different forms of E-money:** - The satisfaction levels with the different forms of E-money, the responses of customers obtained are as follows in the table-

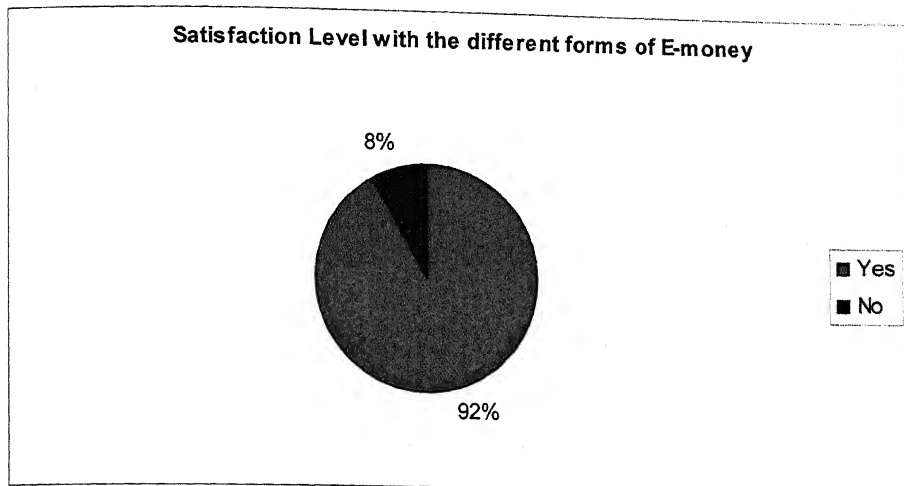
Table 6.45: Satisfaction Level with the different forms of E-money.

Satisfaction Level	No. of Respondents	Percentage
Yes	110	91.67
No	10	8.33
Total	120	100

Sources: -Primary Data.



It is evident from the above table, 91.67% of the respondents are satisfied with the different forms of E-money, and 8.33% of the respondents are not satisfied with it. These data are shown through the Pie chart 6.47 as follows -



**6.3.21:-Satisfaction with the service provider in the area of E-money: -**

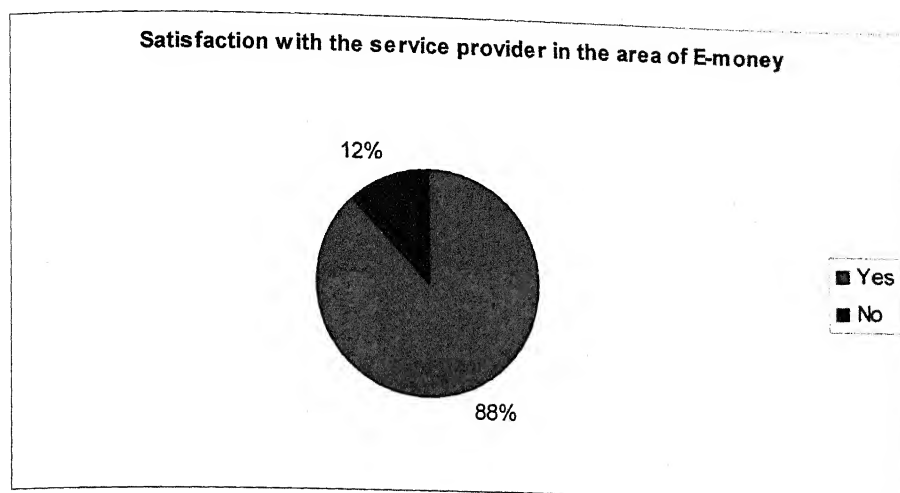
The satisfaction with the service provider in the area of E-money, the responses of customers obtained are as follows in the table-

Table 6.46: Satisfaction with the service provider in the area of E-money.

Satisfaction Level	No. of Respondents	Percentage
Yes	106	88.33
No	14	11.67
Total	120	100

Sources: -Primary Data.

Among 120 respondents, 88.33% of the respondents are satisfied with the service provider in the area of E-money, and 11.67% of the respondents are not satisfied with it. These data are shown through the Pie chart 6.48 as follows -



### **6.3.22:-Satisfaction Level towards the service provider in the area of**

**E-money**: -The sector wise satisfaction level towards the service provider in the area of E-money, the responses of customers obtained are as follows in the table-

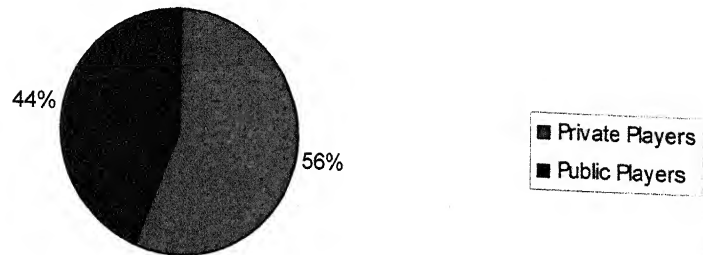
Table 6.47: Satisfaction Level towards the service provider in the area of E-money.

Service Providers ↓	No. of Respondents	Percentage
Private Players	67	55.83
Public Players	53	44.17
Total	120	100

Sources: -Primary Data.

Among 120 respondents, 55.83% of the respondents are satisfied with the Private players, and 44.17% of the respondents are satisfied with the Public players. These data are shown through the Pie chart 6.49 as follows

**Sector wise Satisfaction Level towards the service provider**



## HYPOTHESIS TESTING

### HYPOTHESIS TESTING NO.1

**Null Hypothesis ( $H_0$ ):** - Majority of Consumers is not using the services of Electronic money due to lack of sufficient awareness and knowledge.

**Alternative Hypothesis ( $H_1$ ):** - Consumers are using the services of Electronic money and fully aware about the services of it.

**Table 6.48** Level of Awareness of Consumers and Electronic money users.

Level of Awareness ↓	E-money users (B)	Non users of E-money (β)	Total
Aware about E-money (A)	97	12	109
Not aware about E-money (α)	6	5	11
Total	103	17	120

Sources: -Primary Data.

Here, Awareness regarding the services of Electronic money and the users of Electronic money are independent. On the basis of this null hypothesis, the expected frequency corresponding to the numbers of consumers aware of E-money services and also users would be.

$$\text{Expected of (AB)} = (A*B)/N$$

Where (A) represents awareness of E-money services and (B) represents the users of E-money to the consumers.

A = 109, B = 103, N = 120, then Expected frequency is calculated below

$$(A*B)/N = (109*103)/120 = 93.56.$$

Likewise, the other figure is also calculated in the table 6.49 below

Table 6.49 Calculation of Chi- Square					
Group↓	Observed frequency( $f_o$ )	Expected frequency ( $f_e$ )	$(f_o - f_e)$	$(f_o - f_e)^2$	$(f_o - f_e)^2 \div f_e$
AB	97	93.56	3.44	11.83	0.126
A $\beta$	12	15.44	-3.44	11.83	0.766
$\alpha$ B	6	9.44	-3.44	11.83	1.253
$\alpha\beta$	5	1.56	3.44	11.83	7.59
Total	---	---	---	---	9.735

Here,  $\chi^2$  calculated value is 9.735.

Degree of freedom in this case =  $(r-1)(c-1) = (2-1)(2-1) = 1$ .

The table value of  $\chi^2$  for 1 degree of freedom at 5% level of significance is 3.841. The calculated value is more than the table value and hence it rejects the null hypothesis. Thus we may conclude that, Consumers are using the services of Electronic money and fully aware about the services of it. In other words, the consumers are aware about the services of E-money and enjoying the benefits of it.

### **HYPOTHESIS TESTING NO.2**

**Null Hypothesis ( $H_0$ ):** - There is no significant association between sex, age, education, occupation, income and E-money users.

Table 6.50 Sex and E-money users.

“There is no significant association between sex and E-money users.”

Sex	E-money users	Non users of E-money	Total
Male	92 (87.55)	10 (14.45)	102
Female	11 (15.45)	7 (2.55)	18
Total	103	17	120

Sources: -Primary Data.

Figures given in brackets represent expected frequency.

Calculated  $\chi^2$  value = 10.642. Table Value = 3.841. D.F. = 1.

The calculated value of  $\chi^2$  is more than the table value at 5% level of significance. Hence the hypothesis is rejected. It is therefore concluded that there is significant association between sex and E-money users.

Table 6.51 Age and E-money users.

“There is no significant association between age and E-money users.”

Age	E-money users	Non users of E-money	Total
Less than 35	52 (52.35)	9 (8.65)	61
More than 35	51 (50.65)	8 (8.35)	59
Total	103	17	120

Sources: -Primary Data.

Figures given in brackets represent expected frequency.

Calculated  $\chi^2$  value = 0.032. Table Value = 3.841. D.F. = 1.

The calculated value of  $\chi^2$  is less than the table value at 5% level of significance. Hence the hypothesis is accepted. It is therefore concluded that there is no significant association between age and E-money users.

Table 6.52 Education and E-money users.

“There is no significant association between Education and E-money users.”

Education	E-money users	Non users of E-money	Total
Intermediate	12 (14.60)	5 (2.40)	17
Graduate	39 (38.63)	6 (6.37)	45
Post Graduate	52 (49.77)	6 (8.23)	58
Total	103	17	120

Sources: -Primary Data.

Figures given in brackets represent expected frequency.

Calculated  $\chi^2$  value = 4.005. Table Value = 5.99. D.F. = 2.

The calculated value of  $\chi^2$  is less than the table value at 5% level of significance. Hence the hypothesis is accepted. It is therefore concluded that there is no significant association between Education and E-money users.

Table 6.53 Occupation and E-money users.

"There is no significant association between Occupation and E-money users."

Occupation	E-money users	Non users of E-money	Total
Govt/ Semigovt.	47 (46.35)	7 (7.65)	54
Business	51 (23.18)	5 (3.82)	27
Profession and Farmers	34 (33.47)	5 (5.53)	39
Total	103	17	120

Sources: -Primary Data.

Figures given in brackets represent expected frequency.

Calculated  $\chi^2$  value = 0.478. Table Value = 5.99. D.F. = 2.

The calculated value of  $\chi^2$  is less than the table value at 5% level of significance. Hence the hypothesis is accepted. It is therefore concluded that there is no significant association between Occupation and E-money users.

Table 6.54 Monthly Income and E-money users.

"There is no significant association between Monthly Income and E-money users."

Monthly Income	E-money users	Non users of E-money	Total
< 10,000.	33 (33.47)	6 (5.53)	39
10,000-20,000.	41 (39.48)	5 (6.52)	46
> 20,000.	29 (30.05)	6 (4.95)	35
Total	103	17	120

Sources: -Primary Data.

Figures given in brackets represent expected frequency.

Calculated  $\chi^2$  value = 0.713. Table Value = 5.99. D.F. = 2.

The calculated value of  $\chi^2$  is less than the table value at 5% level of significance. Hence the hypothesis is accepted. It is therefore concluded that there is no significant association between Monthly Income and E-money users.

### HYPOTHESIS TESTING NO.3

**Null Hypothesis ( $H_0$ ):** Fear of loosing confidentiality of their accounts and financial transaction stops consumer from using Electronic money.

**Alternative Hypothesis ( $H_1$ ):** Confidentiality of account and financial transaction motivates the consumer to using the services of E-money.

Table 6.55 Confidentiality of account and financial transaction towards E-money users.

Confidentiality of A/c and financial transaction	E-money users	Non users of E-money	Total
Excellent	21 (22.32)	5 (3.68)	26
Very Good	53 (49.78)	5 (8.22)	58
Average	29 (30.9)	7 (5.1)	36
Total	103	17	120

Sources: -Primary Data.

Figures given in brackets represent expected frequency.

Calculated  $\chi^2$  value = 2.843. Table Value = 5.99. D.F. = 2.

The calculated value of  $\chi^2$  is less than the table value at 5% level of significance. Hence the hypothesis is accepted. It is therefore concluded that fear of loosing confidentiality of their accounts and financial transaction stops consumer from using Electronic money.

### Comparison of Consumer Awareness towards E-Money Services between Bundelkhand Region and KAVAL Region:-

The consumer awareness about E-Money services in Bundelkhand Region and KAVAL Region are given in the following table 6.56-



Regions↓	Total Respondents	No. of Respondents Aware
Bundelkhand Region	120	109
KAVAL Region	120	110
Total	240	219

Sources: -Primary Data.

Let us set the null hypothesis  $H_1: P_1=P_2$ , i.e. the proportion of consumer awareness about the E-money in Bundelkhand Region and KAVAL Region are the same. Where  $p_1$  and  $p_2$  are the proportion of consumer awareness in Bundelkhand and KAVAL Region respectively, and  $x_1$  and  $x_2$  are the number of aware consumers out of the total respondents in Bundelkhand and KAVAL region respectively.

We are given that  $P_1=x_1/n_1=109/120=0.91$

$$P_2=x_2/n_2=110/120=0.92$$

Also the estimate of percentage of consumer awareness in both the regions will be  $P=(n_1P_1+n_2P_2)/(n_1+n_2)=0.91$

$$Q=1-P=1-0.91=0.09$$

Now, Standard error of  $(P_1-P_2) = \sqrt{PQ(1/n_1+1/n_2)}=0.036$

Therefore, test statistic,  $Z=(P_1-P_2)/\text{Standard error of } (P_1-P_2)=-0.277$

Thus the absolute value of  $Z=0.277$

Since the calculated value of  $Z < 1.96$  (the critical value of  $Z$  at 5% level of significance), so the null hypothesis is selected. Thus we can conclude that the proportion of consumer awareness about the E-money in Bundelkhand Region and KAVAL Region are the same.

### **Consumer Awareness towards E-Money Services in Bundelkhand**

#### **Region: -**

Total population of Bundelkhand region=82, 32,100.

Literate population=49, 65, 182.

Let  $p$  be the proportion of the awareness about E-money. An estimate of the proportion of awareness is given by

$$p = x/n = 109/120 = 0.91.$$

Where  $x$  is the number of aware consumers out of the total respondents and  $n$  is the total number of respondents.

Expected number of consumers who are aware about E-money services =  $49,65,182 \times 0.91 = 45,18,315$ . (Approximate).

Percentage of awareness about E-money services = 54.88%.

Thus in Bundelkhand region, 54.88% people are aware about E-money services.

**Comparison of Confidentiality of their Account and Financial Transactions towards E-Money Services between Bundelkhand Region and KAVAL Region:-**

The Confidentiality of their Account and Financial Transactions about E-Money services in Bundelkhand Region and KAVAL Region are given in the following table 6.57-

Regions↓	Total Respondents	No. of Respondents more than average
Bundelkhand Region	120	84
KAVAL Region	120	89
Total	240	173

Sources: -Primary Data.

Let us set the null hypothesis  $H_1: P_1 = P_2$ , i.e. the proportion of confidentiality of account and financial transactions about the E-money in Bundelkhand Region and KAVAL Region are the same. Where  $p_1$  and  $p_2$  are the proportion of confidentiality of account and financial transactions in Bundelkhand and KAVAL Region respectively.

By using the formula as earlier we have calculated absolute value of  $Z=0.701$ , which is less than 1.96(the critical value of  $Z$  at 5% level of significance), so the null hypothesis is selected. Thus we can conclude that the proportion of confidentiality of account and financial transactions about the E-money in Bundelkhand Region and KAVAL Region are the same.

**Confidentiality of their Account and Financial Transactions towards E-Money Services in Bundelkhand Region: -**

Total population of Bundelkhand region=82, 32,100.

Literate population=49, 65, 182.

Let  $p$  be the proportion of confidentiality of their account and financial transactions towards E-money services. An estimate of the proportion of confidentiality of their account and financial transactions towards E-money services is given by

$$p = x/n = 84/120 = 0.70.$$

Where  $x$  is the number of respondent who are confident on their account and do financial transaction out of the total respondents and  $n$  is the total number of respondents.

Expected number of consumers who are confident of their account and do financial transaction towards E-money services=49, 65, 182\*0.70=34, 75, 627. (Approximate).

Percentage of consumers who are confident of their account and do financial transaction towards E-money services=42.22%.

Thus in Bundelkhand region, 42.22% people are confident of their account and do financial transaction towards E-money services.

### Comparison of E-Money users between Bundelkhand Region and KAVAL Region:-

The comparison of E-Money users between Bundelkhand Region and KAVAL Region are given in the following table 6.58-

Regions↓	Total Respondents	E-Money users
Bundelkhand Region	120	103
KAVAL Region	120	108
Total	240	211

Sources: -Primary Data.

Let us set the null hypothesis  $H_1: P_1=P_2$ , i.e. the proportion of E-money users in Bundelkhand Region and KAVAL Region are the same. Where  $p_1$  and  $p_2$  are the no. of E-Money users in Bundelkhand and KAVAL Region respectively.

By using the formula as earlier we have calculated absolute value of  $Z=0.952$ , which is less than 1.96(the critical value of  $Z$  at 5% level of significance), so the null hypothesis is selected. Thus we can conclude that the proportion of E-money users in Bundelkhand Region and KAVAL Region are the same.

### E-Money users in Bundelkhand Region: -

Total population of Bundelkhand region=82, 32,100.

Literate population=49, 65, 182.

Let  $p$  be the proportion of E-money users. An estimate of the proportion of E-money users is given by

$$p = x/n = 103/120 = 0.86.$$

Where  $x$  is the number of E-money users out of the total respondents and  $n$  is the total number of respondents.

Expected number of E-money users=49, 65, 182\*0.86 =42, 70, 056.

(Approximate).

Percentage of E-money users=51.87%.

Thus in Bundelkhand region, 51.87% people are using the services of E-money.

**Analysis from the banks point of view**

**Customer awareness about the E-banking services:** - Public and private both the sectors are providing the services of E-banking.

- In public sector banks, there are 47.5% customers who are aware about the services of E-banking while 52.5% customers are not aware about the services of E-banking. The customers who are not aware about E-banking services due to lack of sufficient knowledge.
- In private sector banks, only 25% customers are aware about E-banking services while 75% customers are not aware about E-banking services. The customers who are not aware about E-banking services due to illiteracy, lack of advertisement, and lack of sufficient knowledge.

Thus though there are various types of E-banking services provided by the both public as well as private sectors banks yet more than 50% banks customers are not aware about E-banking services.

**Customer Satisfaction with the confidentiality of their bank account and Financial Transactions:** - In both the sector, all the bank customers are not satisfied with the confidentiality of their bank account but most of them are satisfied therefore they do financial transactions.

- In public sector banks, 91.25% of the customers are satisfied with the confidentiality of their bank account while only 8.75% are not

satisfied regarding the confidentiality of their bank account due to lack of sufficient knowledge.

- In private sector banks, 92.5% of the customers are satisfied with the confidentiality of their bank account while 7.5% of the customers are not satisfied with the confidentiality of their bank account because they believe more in nationalize bank services.

Thus both the sector of banks are providing E-banking services and more than 90% of their customers are satisfied. Here the more satisfaction level shows their interest to do financial transactions by using their bank account in order to take the advantages of E-banking services.

**E-Banking Services Users:** -There are various E-banking services available in Bundelkhand region by public sector banks as well as private sector banks but all the E-banking services are not used by the bank customers.

- Among the various E-banking services offered by public sector banks, only 73% E-banking services are using by the customers while 27% E-banking services are not used due to lack of sufficient knowledge.
- In private sector banks, out of various E-banking services, only 65% are using by the customers while 35% E-banking services are not used due to lack of interest and lack of sufficient knowledge.

Thus not only in public sectors but also in private sector more than 65% of the E-banking services are used by the bank customers.

**Willingness about E-Banking Services:** -Banks offer various types of services related to E-banking to their customers and they wanted that more and more customers take the advantages of these services.

- In public sector banks, only 48% customers are willing to take the E-banking services while 52% customers are not willing to take E-banking services due to lack of awareness and lack of sufficient knowledge.
- In private sector banks, only 40% customers are willing to take the knowledge of E-banking service while 60% are not interested to know about E-banking services due to lack of sufficient knowledge and they are interested but they unable to do this.

Thus we may concluded that willingness about new E-banking services are very low and not more than but less than 50% in both the sectors.

**Customer Satisfaction with E-Banking Services:** -Though both the sectors of banks offer various types of E-banking services but all the bank customers are not fully satisfied with E-banking services.

- Customer satisfactions about E-banking services in public sector banks are 63% while 37% customers are not fully satisfied with E-banking services.
- Customer satisfactions about E-banking services in private sector banks are 70% while 30% customers are not fully satisfied with E-banking services.

Thus the satisfaction levels of the private sector customers about E-banking services are more than public sectors customers. In both sector banks the customers who are not fully satisfied due to following reasons-

1. Due to technical problems.
2. Limited numbers of ATMs.

3. Lack of civic sense, and
4. Lack of computer literacy.

**Reasons for Using the Services of E-Banking:** - There are various types of customers in the market who have their different motives to use the services of E-money through E-banking. According to banks point of view the main reasons for using the services of E-banking are following-

1. Due to fast services.
2. Easy and safe to use.
3. For saving the time, and
4. No time bar in banking transactions.



## *Chapter 7*

# **Summary, Conclusion and Policy Implication**

---

## **Summary, Conclusion and Policy Implication**

Consumer Behavior is the base for business expansion because of the stiff competition prevalent in the banking industry. With the advent of new banks in 1995 "the concept of consumer behavior" has become an important issue in banks. The survival of banking business is dependent on consumer behavior. Money is a widely accepted medium of exchange, a store of value and a unit of account.

Marketing concept starts with the consumer needs and ends in consumer behavior in meeting these needs. Every action of a person is based on needs. The real problem is to learn what a customer takes into consideration when he chooses the products and services of a particular brand. Such a study is concerned with consumer behavior. Thus, identifying customer needs is a prerequisite for successful behavior. If a bank product does not fill a need or is marketed to satisfy a need that customers do not feel, the products and services will not be marketed successfully.

The Electronic Money services have become very important in modern economic era. Without E-money life for urban consumer becomes miserable as it is economical in terms of both time and money. Usages of E-money are almost inevitable in urban areas. The usages of E-money facilities are increasing the efficiency of both different forms of services such as banking, telecommunication and other forms of commercial

transactions. It is cost effective both for service providers and the consumers. In the view of above aspects, following objectives are framed for the present study.

**Objectives of the Study:** -All human acts are based on some objectives. The present study is mainly aimed at examining the impact electronic money services on consumer behavior and role of these facilities in their financial problems and satisfying their needs. Keeping this in view the study mainly focused on the following objectives:-

- 1- To analyze socioeconomic and psychological profile of different strata of consumers taken in current study.
- 2- To study the expectation level of electronic money users of the area taken in the study.
- 3- To analyze the impact of customers motivation and satisfaction on Electronic money vis-à-vis impact of electronic money on customers.
- 4- To know the positive and negative impacts of random technological changes on customers.
- 5- To compare the consumer awareness, confidentiality of account and financial transactions, and E-money users in Bundelkhand regions and KAVAl regions.

Seeing the importance of objectives, following hypothesis were framed and tested.

**Hypothesis of the Study:** -The study is carried out mainly to prove/disprove the following hypothesis:-

(A)-Majority of consumers are not using the services of electronic money due to lack of sufficient awareness and knowledge.

(B)- There is no significant association between sex, age, education, occupation, income and E-money users.

(C)-Fear of loosing confidentiality of their accounts and financial transaction stops consumer from using electronic facility.

Chapter 2 is summarized as research design and selection of banks in Bundelkhand region in order to analyze the consumer behavior from bank's point of view.

**Research Design:** -The present study is descriptive type and the nature of study is qualitative as well as quantitative. The sample information's were collected from Bundelkhand region and KAVAL region of U.P. KAVAL region stands for Kanpur, Allahabad, Varansi, Agra and Lucknow districts of Uttar Pradesh.

**A. Sample Design:** -This study is based on the following procedures-

1. **Universe:** - All the literate population has considered as the consumer of Electronic Money users as universe in Bundelkhand region, and for comparison, the total literate population as consumers of KAVAL region have selected as universe.
2. **Selection of Sampling Unit:** -In this study, the sampling survey was conducted in the Bundelkhand region of Uttar Pradesh and KAVAL region of Uttar Pradesh for the purpose of comparison. There are seven districts viz. Jhansi, Banda, Jalaun, Hamirpur, Lalitpur, Chitrakut and Mahoba, which comes under the Bundelkhand region and five districts i.e. Kanpur, Allahabad,

Varanasi, Agra, and Lucknow, which comes under the KAVAL region.

3. **Sample Size:** - The overall sample size for the study is over 120 consumers in Bundelkhand region and 120 consumers in KAVAL region. In Bundelkhand region the sample size is 0.25% of the literate population while in KAVAL region 0.10% of the literate population.
4. **Sampling Procedure:** - Non probability sampling methods has been used in this study. Purposive sampling has been used to select the regions while Quota sampling has been used to select the size of sample in the specified regions to collect the primary data.

**B. Selection of Banks in Bundelkhand Region:** - In order to know the consumer behavior from the service provider's point of view, two large public sector banks and two large private sector banks have been considered in the study. State bank of India (SBI) and Punjab National Bank (PNB) are taken into consideration as public sector banks while Industrial Credit and Investment Corporation of India (ICICI) and Housing Development Finance Corporation (HDFC) are taken into consideration as private sector banks in Bundelkhand region. These banks have been chosen because they have a good market share and adopted technology.

#### **Justification of Present Study**

Chapter 3 discusses 'Indian Consumer and its Behavior'. As a consumer, we will be benefited if we would have greater insight into consumer behavior. The field of consumer behavior holds great interest for us as

consumers, as marketers, and as scholars of human behavior. The study of consumer behavior enables us to become a wiser consumer.

The consumption pattern and the behavior of the consumer have been changing gradually. Since the last two decades we have seen many changes occurring in the attitude, perception, motivation, spending habits, purchase, and post purchase behavior of the consumer.

New innovative marketing techniques, branding the product, suited the Indian style. The Indian consumer is very price conscious, and to suit the consumer changes in the products and services. Changes have been taken place in the Indian consumer due to innovation of new products and services and the marketing mix in liberalization. The behavior of today's customers is changed due to the economic liberalization and economic crises.

The marketers have adopted a new strategy. They have modified the old strategies, broadened their visions and are aware how they have to provide services. Adjust themselves to the customer and not the customer to them. The marketers are not satisfied with just satisfaction. They are going beyond the expectation of the customer and are delighting the customer and even to make them ecstatic with the product and services offered.

This is the age of modern marketing and the age of taking risks. This is the age to establish the identity through the use of marketing mix, providing services, giving that little extra to the customer that created the required differentiation between one product and the other. This is the age of positioning and the age of providing service. This is age of relationship marketing and the age of studying the further expected changes in the

behavior of the consumer. Communicating with the customer is the core of good customer service. "Coming together is the beginning, keeping together is progress and working together is success."

In the age of information technology the consumer who can not be seen or meet are the Cyber consumer. The computers are being put to wide use. They are being used for business and domestic purposes, for government work, for buying and selling, for recording and retrieving information, for electronic communication with the greatest of ease, and they are used all over the world.

E-Business Marketing provides information through internet and online services for buying and selling products and exchange of information. It cuts service cost for the marketing and improves the quality of goods and services, and increases the speed of delivery. "E-Business enables business to be transacted at the rate of thought." Business challenges can be overcome, competition can be met, and strategies can be evolved to meet the competition. E-business enables to be transacted globally without any significant barrier. Voluminous and repetitive documentation can be eliminated. It enables differentiation for competitive advantage.

Consumers keep making decisions to buy the products of their choice. As we know that the decision making is influenced by the internal determinants which include learning, memory, personality, self concepts, attitude, motivation and involvement. The external determinants consist of cultural and sub-cultural influences, social group influences, family influences, social influences and other influences. External and internal influences thus, together influence the decision making process and most customers follow these steps in a logical manner. E-Business enhances

this process, and saves time of the consumer by providing all relevant information on the internet that is required.

E-Consumer is fully informed consumer and is aware of various products offering by all competitors. His purchase decision can not be influenced easily. He takes rational decision usually decides to go for a product that offers good value for money. He also knows the advantages and disadvantages of when to buy, how to buy, from where to buy, what to buy, and from whom to buy.

After using the product and service consumers can electronically interact with the manufacture or marketer giving valuable feedback. The critical feedback should be given to the company regarding the improving the product. If the consumer is dissatisfied, he may communicate his anger against the company and many of people worldwide instantly. This may affect the reputation and goodwill of the company and tarnish its image. A satisfied customer acts as a best advertising and promotional means of worldwide publicity at no cost.

**Public Policy and Consumer Protection:** -In the earlier decades the consumer was unorganized and was generally taken for a ride. Today, the consumer is aware of his rights and is highly educated and experienced. He was earlier being exploited in many ways. Now consumers are complained and criticized the factors like price, quality, advertising, packing, distribution, after sales service etc. There were many unfair trade practices prevalent in India.

The consumer protection Act, 1986 has provided a legal umbrella to safeguard the interests of consumers and to give them cheap and speedy



justice. In order to know the significance of the consumer protection Act, 1986, a bird's eye view of the provisions may be made, and then it can be assessed whether the enactment has really given relief to the consumer.

### **Development of Electronic Money with Technological Changes**

In chapter 4, 'Development of Electronic Money with Technological Changes' has been discussed. When E-commerce began to emerge in 1996, its first wave of applications concerned Business-to-Consumer (B2C) transactions which took off with amazing speed. These early successes triggered an explosion of B2C oriented online suppliers, as more and more firms specializing in consumer goods or services made it their primary concern to create attractive web to enjoy the fruits of co-branding, jointly organized sales-promotion schemes, centralized payment facilities and other advantages from belonging to a large network. Their rapid spread was taken as sign that B2C commerce had the potential of maturing rapidly into a viable alternative to traditional retail trade conducted in brick-and-mortar stores.

To the extent that the future success of the internet as an engine of economic growth depends on its restructuring from an open-access medium of communication into a restricted access supplier of paid services, online money would surely help that transformation along while at the same time also completing the transition to electronic money. In the process debit cards and credit cards replaced by smart cards which can be inserted into the access tools of the internet. Electronic Fund Transfers move beyond wholesale (B2B) transactions to retail (B2C and P2P) transactions and so become the primary mechanism for moving money around. Net-based payments systems, using digital cash, will become part

of sophisticated online shopping protocols which in turn will facilitate the rapid growth of E-commerce. Banking will increasingly move online, as will the trading of securities in the financial markets. The internet might evolve gradually into the primary locus of money creation and credit extension, whereby it pushes its impact on our economy beyond commerce to production and finance. We have arrived at the threshold of a new era in which online money reshapes the modus operandi of our 21<sup>st</sup>-century economy.

**Changing Scenario in Banking Sector in India:** - In recent years, there has been a sea change in Indian banking strategies with more focus on quality, efficient services and profitability. The first change along this line was brought in by the foreign banks with their emphasis on high quality and efficient service. These were combined with the technological changes like satellite banking and Tele-banking manned by skeletal staff and lesser number of branches. Technology innovation and intense competition among existing banks have made banks to rethink the way they operated their business.

The important sophisticated or high technology for improving customer service, productivity customer service, productivity and operational efficiency of banks is well recognized. This enabled a wide range of banking products and services, being made available to retail and wholesale customers through an electronic distribution channel. As a part of their action plans, banks in India are now continuously focusing on technology up gradation with a customer centric approach. To realize this, the banks have recently tied up with various software companies and with premier technological institutes like IITs, who can offer their best

expertise consultancy services to the banks in applying the right kind of technology in the right place so as to benefit the customers.

Technology in the form of electronic banking has made it possible to find alternate banking practices at lower costs. E-banking has been setup exclusively to serve clients through a network, providing customers with the full range of banking services such as deposits, withdrawals, funds transfer, loans and other forms of transactions. It is worth mentioning the words of Bill Gates 'We need banking, do we really need banks?'.

**Products of Electronic-Banking:** - Technology has always been one of the key thrust areas for the banks. The banks have already marked a significant progress on the technological front. During the past few years the banks have under taken a swing of IT initiatives including branch computerization of all controlling offices. With the introduction of the internet and the opportunities it has provided, new products and services are emerging that are set to change the way we look at money and the monetary system. The few electronic banking products are Automated Teller Machines (ATM), Banker's Automated Clearing System (BACS), Tele Banking Services, Cash Management Services (CMS), Electronic Funds Transfer (FET), Electronic Data Interchange (EDI), Electronic Cheque System (ECS), Cheques Handling, Cyber Cash, Credit Card, Debit Card and Smart cards.

**Branchless Banking-A New Dimension of Financial Inclusion:** -

In a many countries, banks and other commercial service providers are finding new ways to make money delivering financial services to unbanked people rather than using bank branches and their own field officers, they offer banking and payment service through postal and retail

outlets, including grocery stores, pharmacies, seed and fertilizer retailers, and gas stations among others. For poor people "Branchless Banking" through retail agents may be for more convenient and efficient than going to bank branch.

Branchless Banking (BB) represents a significantly cheaper alternative to conventional branch-based banking that allows financial institution and other commercial actors to offer financial services outside traditional bank premises by using delivery channels like retail agents, mobile phone etc. BB can be used to substantially increase the financial services outreach to the un-banked communities.

### **Impact of Electronic Money on Consumer Behavior**

Chapter 5 deals with 'Impact of Electronic Money on Consumer Behavior'. The introduction of Electronic Money marked a milestone in the historical development of the services of e-banking and accommodates its dynamic growth much more effectively. This advantage becomes especially evident when looking at the conditions of its general acceptability.

To serve more and retain customers, banks in India have changed the old concept of accepting deposits and lending money. Use of technology by banks has increased the productivity very fast through automation of banking operations. The electronic technology instruments adopted by Indian banks are ATMs, Telex, Fax, internet, Tele banking, E-banking, Electronic clearing services, on-line banking, mobile banking, wireless banking services, and electronic funds transfer. With the introduction, implementation and adoption of these techniques by the banks have totally

revolutionized the functions, operations, administration, decision-making and management information system. All these techniques or instruments helped the banks in retaining the existing customers, attracting new customers and provide lot of services with the help of these instruments to give them satisfaction.

With the introduction of electronic banking, banks are moving their focus of payment from the physical presence of money to the use of electronic money. Customer can perform banking transactions without having to step into the office or the branch. The bank, which provides value-added services and satisfaction to customers, should be the winner in the market. By way of launching new products, the banks are trying to make the "near" customers to "dear" ones.

Credit card fraud is one of the biggest threats to business establishments today. In order to combat the fraud effectively, it is important to first understand the mechanisms of executing a fraud. Credit card fraudsters employ a large number of *modus operandi* to commit fraud.

For a low-tech form of fraud, the simplest is to simply steal a customer's card. In this scenario, the user's PIN is observed by someone watching as they use the machine; they are then mugged for their card by a second person, who has taken care to stay out of range of the ATM's surveillance cameras. However, this offers little advantage compared to simply mugging the victim for their money, and carries the same risks to the offender as other violent crimes.

By contrast, a newer high-tech *modus operandi* involves the installation of a magnetic card reader over the real ATM's card slot and the use of a

wireless surveillance camera or a modified digital camera to observe the user's PIN. Card data is then cloned onto a second card and the criminal attempts a standard cash withdrawal. The availability of low-cost commodity wireless cameras and card readers has made it a relatively simple form of fraud, with comparatively low risk to the fraudsters.

E-Banking is beneficial to all sections of the society, but there are certain risks which have to be taken care by the management, these are operational risk, reputation risk, legal risk and security controls.

**Consumer in Banking Sector:** - In order to survive, commercial banks have to seek business by aggressively marketing their products. Product differentiation is often employed as a major technique to service in competitive market. Since product differentiation on the interest front and service charges is ruled out for Indian banks, it appears that banks have to bank their hopes on the improvement of customer services.

In order to mobilize more deposits and attract customers to use the services of a particular bank, a particular bank has to necessarily differentiate its customer services from other banks and to offer better customer service in banks means satisfying the needs of customers, at the right time, and in a right manner. It is necessary that bankers tailor their services to the needs of customers and not vice versa. A large portion of customers' complaints arises because of the disparity between customer expectation and bank services.

Products offered by banks have been changing over years, particularly in recent years. These products are getting refined and revised in the light of customer need, but not promptly enough or adequately and hence

dissatisfaction arises. There are abnormal delays in receiving payments and customers have to wait indefinitely without anybody attending to them properly at the counter. Even the issue of cheque book takes twenty to thirty minutes because the officer is always busy with cheques, vouchers and registers. Updating of pass book also takes long time. Delivery system for customer services comprise of five elements i.e. speed, timeliness, accuracy, courtesy and concern.

### **Core Banking Services of Indian Banks: -**

Now a day Banks are more and more zealous for providing Core Banking services in India. From practical point of view there is much to be achieved for implementing international standard as conditions of various Banks are different in nature viz., infra-structure, capital adequacy and human relation norms.

Last year, the aggregate total income of 10 private sector banks increased by 51.7% besides an increase in fee based income by 41.7%, whereas Public Sector Banks could not step to the desired level.

### **Analysis and Interpretation**

Chapter 6 is summarized as hypothesis testing, major findings in Bundelkhand region and comparison of it with the findings of KAVAL region.

### **HYPOTHESIS TESTING**

A set of hypothesis was formulated at the planning stage of the study. These hypotheses have been presented in chapter I. These are now explained in the following paragraphs. On the basis of different hypothesis a brief summary is presented in the following sections.



First hypothesis was that majority of Consumers is not using the services of Electronic money due to lack of sufficient awareness and knowledge against the alternative hypothesis that Consumers are using the services of Electronic money and fully aware about the services of it.

The level of awareness of consumers and electronic money users have been shown in the following table No 7.1

Table 7.1 Level of Awareness of Consumers and Electronic money users.

Level of Awareness ↓	E-money users (B)	Non users of E-money (β)	Total
Aware about E-money (A)	97 (93.56)	12 (15.44)	109
Not aware about E-money (α)	6 (9.44)	5 (1.56)	11
Total	103	17	120

Sources: -Primary Data.

Figures given in brackets represent expected frequency.

Here, the calculated value of  $\chi^2$  for 1 degree of freedom at 5% level of significance is 9.735 and the table value of  $\chi^2$  for 1 degree of freedom at 5% level of significance is 3.841. The calculated value is more than the table value and hence it rejects the null hypothesis. Thus we may conclude that, Consumers are using the services of Electronic money and fully aware about the services of it. In other words, the consumers are aware about the services of E-money are enjoying the benefits of it.

Second hypothesis was that there is no significant association between sex, age, education, occupation, income and E-money users. This hypothesis was divided into five parts and has been shown through the following five tables 7.2.1, 7.2.2, 7.2.3, 7.2.4, and 7.2.5.



Table 7.2.1 Sex and E-money users.

"There is no significant association between sex and E-money users."

Sex	E-money users	Non users of E-money	Total
Male	92 (87.55)	10 (14.45)	102
Female	11 (15.45)	7 (2.55)	18
Total	103	17	120

Sources: -Primary Data.

Figures given in brackets represent expected frequency.

Calculated  $\chi^2$  value = 10.642. Table Value = 3.841. D.F. = 1.

The calculated value of  $\chi^2$  is more than the table value at 5% level of significance. Hence the hypothesis is rejected. It is therefore concluded that there is significant association between sex and E-money users.

Table 7.2.2 Age and E-money users.

"There is no significant association between age and E-money users."

Age	E-money users	Non users of E-money	Total
Less than 35	52 (52.35)	9 (8.65)	61
More than 35	51 (50.65)	8 (8.35)	59
Total	103	17	120

Sources: -Primary Data.

Figures given in brackets represent expected frequency.

Calculated  $\chi^2$  value = 0.032. Table Value = 3.841. D.F. = 1.

The calculated value of  $\chi^2$  is less than the table value at 5% level of significance. Hence the hypothesis is accepted. It is therefore concluded that there is no significant association between age and E-money users.

Table 7.2.3 Education and E-money users.

"There is no significant association between Education and E-money users."

Education	E-money users	Non users of E-money	Total
Intermediate	12 (14.60)	5 (2.40)	17
Graduate	39 (38.63)	6 (6.37)	45
Post Graduate	52 (49.77)	6 (8.23)	58
Total	103	17	120

Sources: -Primary Data.

Figures given in brackets represent expected frequency.

Calculated  $\chi^2$  value =4.005. Table Value=5.99. D.F. =2.

The calculated value of  $\chi^2$  is less than the table value at 5% level of significance. Hence the hypothesis is accepted. It is therefore concluded that there is no significant association between Education and E-money users.

Table 7.2.4 Occupation and E-money users.

“There is no significant association between Occupation and E-money users.”

Occupation	E-money users	Non users of E-money	Total
Govt/ Semigovt.	47 (46.35)	7 (7.65)	54
Business	51 (23.18)	5 (3.82)	27
Profession and Farmers	34 (33.47)	5 (5.53)	39
Total	103	17	120

Sources: -Primary Data.

Figures given in brackets represent expected frequency.

Calculated  $\chi^2$  value =0.478. Table Value= 5.99. D.F. =2.

The calculated value of  $\chi^2$  is less than the table value at 5% level of significance. Hence the hypothesis is accepted. It is therefore concluded that there is no significant association between Occupation and E-money users.

Table 7.2.5 Monthly Income and E-money users.

“There is no significant association between Monthly Income and E-money users.”

Monthly Income	E-money users	Non users of E-money	Total
< 10,000.	33 (33.47)	6 (5.53)	39
10,000-20,000.	41 (39.48)	5 (6.52)	46
> 20,000.	29 (30.05)	6 (4.95)	35
Total	103	17	120

Sources: -Primary Data.

Figures given in brackets represent expected frequency.

Calculated  $\chi^2$  value = 0.713. Table Value = 5.99. D.F. = 2.

The calculated value of  $\chi^2$  is less than the table value at 5% level of significance. Hence the hypothesis is accepted. It is therefore concluded that there is no significant association between Monthly Income and E-money users.

Third hypothesis was that Fear of loosing confidentiality of their accounts and financial transaction stops consumer from using Electronic money against the alternative hypothesis was that Confidentiality of account and financial transaction motivates the consumer to using the services of E-money.

The confidentiality of account and financial transaction towards E-money users has been shown in the following table No 7.3.1.

Table 7.3.1 Confidentiality of account and financial transaction towards E-money users.

Confidentiality of A/c and financial transaction	E-money users	Non users of E-money	Total
Excellent	21 (22.32)	5 (3.68)	26
Very Good	53 (49.78)	5 (8.22)	58
Average	29 (30.9)	7 (5.1)	36
Total	103	17	120

Sources: -Primary Data.

Figures given in brackets represent expected frequency.

Calculated  $\chi^2$  value = 2.843. Table Value = 5.99. D.F. = 2.

The calculated value of  $\chi^2$  is less than the table value at 5% level of significance. Hence the hypothesis is accepted. It is therefore concluded

that fear of loosing confidentiality of their accounts and financial transaction stops consumer from using Electronic money.

**Comparison of Consumer Awareness towards E-Money Services between Bundelkhand Region and KAVAL Region:-**

The consumer awareness about E-Money services in Bundelkhand Region and KAVAL Region are given in the following table No7.4

Regions↓	Total Respondents	No. of Respondents Aware
Bundelkhand Region	120	109
KAVAL Region	120	110
Total	240	219

Sources: -Primary Data.

Here the null hypothesis was set up that the proportion of consumer awareness about the E-money in Bundelkhand Region and KAVAL Region are the equal.

By using the Z-test the absolute value of  $Z=0.277$

Since the calculated value of  $Z < 1.96$  (the critical value of  $Z$  at 5% level of significance), so the null hypothesis is accepted. Thus we can conclude that the proportion of consumer awareness about the E-money in Bundelkhand Region and KAVAL Region are the equal.

By using the proportion the percentage of awareness about E-money services in Bundelkhand region = 54.88%.

Thus in Bundelkhand region, 54.88% people are aware about E-money services.

**Comparison of Confidentiality of their Account and Financial Transactions towards E-Money Services between Bundelkhand Region and KAVAL Region:-**

The Confidentiality of their Account and Financial Transactions about E-Money services in Bundelkhand Region and KAVAL Region are given in the following table No 7.5

Regions↓	Total Respondents	No. of Respondents more than average
Bundelkhand Region	120	84
KAVAL Region	120	89
Total	240	173

Sources: -Primary Data.

Here the null hypothesis was that the proportion of confidentiality of account and financial transactions about the E-money in Bundelkhand Region and KAVAL Region are the same.

By using the Z-test we have calculated absolute value of  $Z=0.701$ , which is less than 1.96(the critical value of Z at 5% level of significance), so the null hypothesis is accepted. Thus we can conclude that the proportion of confidentiality of account and financial transactions about the E-money in Bundelkhand Region and KAVAL Region are the same.

#### **Confidentiality of their Account and Financial Transactions towards E-Money Services in Bundelkhand Region: -**

Total population of Bundelkhand region=82, 32,100.

Literate population=49, 65, 182.

By using the proportion the percentage of consumers who are confident of their account and do financial transaction towards E-money services=42.22%.

Thus in Bundelkhand region, 42.22% people are confident of their account and do financial transaction towards E-money services.

**Comparison of E-Money users between Bundelkhand Region and KAVAL Region:-**

The comparison of E-Money users between Bundelkhand Region and KAVAL Region are given in the following table No 7.6

Regions↓	Total Respondents	E-Money users
Bundelkhand Region	120	103
KAVAL Region	120	108
Total	240	211

Sources: -Primary Data.

Here the null hypothesis was that the proportion of E-money users in Bundelkhand Region and KAVAL Region are the same.

By using the Z-test we have calculated absolute value of  $Z=0.952$ , which is less than 1.96(the critical value of Z at 5% level of significance), so the null hypothesis is accepted. Thus we can conclude that the proportion of E-money users in Bundelkhand Region and KAVAL Region are the same.

**E-Money users in Bundelkhand Region: -**

Total population of Bundelkhand region=82, 32,100.

Literate population=49, 65, 182.

By using the proportion the percentage of E-money users in Bundelkhand region=51.87%.

Thus in Bundelkhand region, 51.87% people are using the services of E-money.

**Analysis from the banks point of view**

**Customer awareness about the E-banking services:** - Public and private both the sectors are providing the services of E-banking.

- In public sector banks, there are 47.5% customers who are aware about the services of E-banking while 52.5% customers are not aware about the services of E-banking. The customers who are not aware about E-banking services due to lack of sufficient knowledge.
- In private sector banks, only 25% customers are aware about E-banking services while 75% customers are not aware about E-banking services. The customers who are not aware about E-banking services due to illiteracy, lack of advertisement, and lack of sufficient knowledge.

Thus though there are various types of E-banking services provided by the both public as well as private sectors banks yet more than 50% banks customers are not aware about E-banking services.

**Customer Satisfaction with the confidentiality of their bank account and Financial Transactions:** - In both the sector, all the bank customers are not satisfied with the confidentiality of their bank account but most of them are satisfied therefore they do financial transactions.

- In public sector banks, 91.25% of the customers are satisfied with the confidentiality of their bank account while only 8.75% are not satisfied regarding the confidentiality of their bank account due to lack of sufficient knowledge.
- In private sector banks, 92.5% of the customers are satisfied with the confidentiality of their bank account while 7.5% of the customers are not satisfied with the confidentiality of their bank account because they believe more in nationalize bank services.

Thus both the sector of banks are providing E-banking services and more than 90% of their customers are satisfied. More satisfaction level shows their interest to do financial transactions by using their bank account in order to take the advantages of E-banking services.

**E-Banking Services Users:** -There are various E-banking services available in Bundelkhand region by public sector banks as well as private sector banks but all the E-banking services are not used by the bank customers.

- Among the various E-banking services offered by public sector banks, only 73% E-banking services are using by the customers while 27% E-banking services are not used due to lack of sufficient knowledge.
- In private sector banks, out of various E-banking services, only 65% are using by the customers while 35% E-banking services are not used due to lack of interest and lack of sufficient knowledge.

Thus not only in public sectors but also in private sector more than 65% of the E-banking services are used by the bank customers.

**Willingness about E-Banking Services:** -Banks offer various types of services related to E-banking to their customers and they wanted that more and more customers take the advantages of these services.

- In public sector banks, only 48% customers are willing to take the E-banking services while 52% customers are not willing to take E-banking services due to lack of awareness and lack of sufficient knowledge.
- In private sector banks, only 40% customers are willing to take the knowledge of E-banking service while 60% are not interested to



know about E-banking services due to lack of sufficient knowledge and they are interested but they are unable to do this.

Thus we may conclude that willingness about new E-banking services are very low and not more than but less than 50% in both the sectors.

**Customer Satisfaction with E-Banking Services:** -Though both the sectors of banks offer various types of E-banking services but all the bank customers are not fully satisfied with E-banking services.

- Customer satisfactions about E-banking services in public sector banks are 63% while 37% customers are not fully satisfied with E-banking services.
- Customer satisfactions about E-banking services in private sector banks are 70% while 30% customers are not fully satisfied with E-banking services.

Thus the satisfaction levels of the private sector customers about E-banking services are more than public sectors customers. In both sector banks the customers who are not fully satisfied due to following reasons-

1. Due to technical problems.
2. Limited numbers of ATMs.
3. Lack of civic sense, and
4. Lack of computer literacy.

**Reasons for Using the Services of E-Banking:** - There are various types of customers in the market who have their different motives to use the services of E-money through E-banking. According to banks point of view the main reasons for using the services of E-banking are following-

1. Due to fast services.
2. Easy and safe to use.

3. For saving the time, and
4. No time bar in banking transactions.

In general, the findings in this study indicate that majority of the consumers may have positive attitudes towards E-money while rest may have misconceptions and negative attitudes towards E-money. Thus the impacts of E-money on customers are more positive in comparison to negative. Hence these findings should be useful in helping the service providers of E-money to improve the quality of services and motivate the customers to take the benefit of it.

In Bundelkhand region very few banks are providing the level of attention to ongoing E-money services. Although many banks have a customer service department that customers can call to get account information and to resolve problems but employees may not be trained to handle the unsatisfied customers with the appropriate degree of diplomacy.

Though E-money is getting popular and spreading very fast in Indian economy but in Bundelkhand region most of the people do not know about it and people who know about it, are reluctant to use it due to some misconception like password hacking, privacy, security etc. This phenomenon is pervasive even in literate people residing in urban area then what to say about rural or remote areas of Bundelkhand region.

On the basis of the study following suggestions can be made for improving the consumer behavior and electronic money services.

**Suggestions for Credit Card Fraud Protection:** - The universal acceptance of credit cards as a means of payment has created a new type of criminal who fraudulently obtains good and services by using other

people's credit cards. The credit card frauds can be checked by exercising proper safeguards both at the level of card holders and merchants. The following suggestions should be exercised by the cardholders, merchants and the banks.

**(A)-Cardholders: -**

1. Never leave the credit card unattended.
2. Destroy expired cards after cutting it into several pieces.
3. Put signature on the specified strip immediately on receipt of the card.
4. Report lost or stolen card immediately to the issuer bank.
5. Do not hand over the credit card to anyone other than the merchant when making a payment.
6. Memorize PIN number and destroy the PIN slip sent by the issuer bank.
7. Be careful while giving personal and credit card information to an unknown person.
8. Destroy all financial information (i.e. account number, bank statement, ATM and sales receipt etc.) before throwing it away.
9. Verify details of the transaction on the credit card statement with the receipts of cash withdrawal and purchases made.
10. Collect the card immediately after a transaction is complete.
11. Ensure that the merchant processes the transaction in your presence. Keep an eye on the card during all transactions.
12. Keep a record of card account number, expiry date and the toll free call number.
13. Do not sign a blank credit card slip and always verify its details.
14. Do not give credit card to someone to use.

15. Do not ask for assistance from stranger while withdrawing cash at ATM.

**(B)- Merchants:** - Merchants should be extra cautious so that fraud should not eat up their profit. They should watch suspicious behavior as fraudulent transactions have certain characteristics in common. Although these characteristics could never be conclusive proof of a fraudulent transaction, the following will help in identifying suspicious behavior.

1. Takes out his card from his pocket instead of a wallet.
2. Purchases an unusual amount of expensive items.
3. Makes several small purchases to stay under the floor limit, or enquires about the floor limit.
4. Signs the sale slip slowly.
5. Charges expensive items on a newly valid credit card.
6. Cannot provide photo identification.
7. Hurries at the closing time of the merchant establishment.
8. Purchases large items, and insists on taking it immediately, even if delivery is included in the price.

Be extra careful when a credit card: -

- Seems to be counterfeited or it seems as though the information (i.e. expiry date, hologram, number, embossed name etc.) there on is altered.
- The signature on the card and sales slips differs.
- The validation date expired.
- The security features have been tampered with. (Take a look at the security features of common credit cards).

**(C)- Banks: -**

1. Proper verification of credit cardholder's identity, income proof, address proof etc. before issuing credit cards.
2. Credit cards with photos be given preference and encouraged.
3. Such kind of arrangement is made so that only one person can enter at a time at ATM centre.
4. While issuing duplicate credit cards, proper verification should be again made. Lost reported cards may be deactivated immediately to safeguard cardholder's interest.
5. Frequent change of address is discouraged and if required, proper physical verification be made.
6. Bank may consider issue of chip-based smart cards with EMV complaint (Microchip based Technology) instead of magnetic strip based credit cards.

**Suggestions for ATM Card Fraud Protection:** -For customers common sense is the best guide to using an ATM safely. While using an Automated Teller Machine (ATM) the customer must know the following:-

**(A)- Related to PIN and Card: -**

1. Protect the secrecy of our Personal Identification Number (PIN).  
Protect our ATM card as we protect hard cash.
2. Do not keep our Bank ATM card and Personal Identification Number (PIN) together. Do not write PIN on the card or at a place where it can be discovered.
3. Do not give information regarding our ATM card or PIN over the telephone to any one even one claiming to be from our bank. Criminals who fraudulently used cards for telephone and online transactions do not have to give a Personal Identification Number (PIN) or signature to the merchant on the phone or online. The

charges are simply debited directly to our account. We would not come to know until we get our next bank statement.

4. Neither lend our ATM card to anyone or nor reveal PIN to another person. Doing this may tempt that person to conduct transactions using the card or Pin.
5. Before disposing old cards, cut them up though the account number.
6. Sign our new cards as soon as we receive them.
7. Keep a record of our card numbers, their expiration dates, and the phone number and address of each bank in a secure place.
8. For protection of ATM and Debit cards that involve a PIN, keep our PIN a secret. Do not use our birth date, phone number, and house number as the PIN.
9. Do memorize the PIN.
10. Change our ATM PIN at least once in every 2 months.
11. The best protections against card fraud are to know where our cards are at all times and to keep them secure.

**(B)-Related to Withdrawals: -**

1. Remember not to leave our card at the ATM.
2. Never allow yourself to be distracted while carrying out our transaction.
3. Do not accept assistance from anyone we do not know when using an ATM.
4. Do not display our cash, pocket it as soon as the ATM transaction is completed and count the cash later when we are in the safety of our own car, home, or other secure surrounding.

**(C)-Related to ATM: -**

1. If we are using an ATM that requires and to open the door, do not permit an unknown person to enter with us. Once inside the vestibule, make sure the door is completely closed or not.
2. Choose an ATM that is well lighted and monitored by a surveillance camera or a security guard.
3. Minimize our time at the ATM. Have our card ready. If we are making a deposit, fill up paying in slip (deposit slip) at home; seal the envelope before we reach the ATM.
4. Use our free hand to cover the ATM keyboard while type the PIN. Prevent others from seeing while enter our PIN by using body to shield their view.
5. Do not re-enter our PIN if the ATM swallows our card. Card the bank immediately.
6. Use an ATM only where and when we feel completely comfortable. Pay attention to the machine before using it. If something appears unusual or unfamiliar, use another ATM.
7. Never use an ATM, which looks suspicious.
8. Never use ATMs that have messages or signs fixed to them indicating that the screen directions have been changed, especially if the message is posted over the card reader.
9. Do not insert our ATM card into an obscurely placed ATM machine, or one with a card slot protruding from the face of the machine.

**(D)- Related to Loss/ theft of the Card: -**

1. Report the loss, theft or unauthorized use of card or PIN to Bank without any loss of time.

2. A stolen ATM/Debit card can be taken to any merchant and used to charge purchases to our "account". All that is needed is a forged signature. This can drain our account.
3. Once we discover the theft, we must report it to the police, close our account, open a new one and get new bank cards.
4. If we find electronic banking transaction is incorrectly reported on a receipt or statement, promptly notify the bank. Failure or delay to promptly notify Bank of the loss, theft, or unauthorized use of card or PIN will keep you exposed to risks.
5. If we notice transactions we did not make, or if our balance has dropped suddenly without activity by us, immediately report the problem to our bank. Some one may have co-opted our account information to commit fraud. Use the special telephone number that many card issuers list on their billing statements. Do not forget to follow up our phone call with a letter.

**Policy Implications for Banks:** - On the basis of the study the following suggestions can be made for improving the services of electronic money to the service providers:

- 1- The customers want from the staff of E-money services providers to be ready and willing to take care of their needs. They expect prompt and accurate resolution of any errors that might occur.
- 2- Customers expect bank staff to be courteous and competent. They expect to be reassured through bank employees' actions that staff members not only nice and treat them with respect but also are able and willing to help. They want to hear expressions of courtesy, such as "Please" and "Thank You". They expect bank staff to be



considerable of their feelings and sensitive to the privacy of their financial transactions.

- 3- Consumers want that the service providers of E-money show a genuine interest in their financial needs and wants in one way to gain their confidence. The E-money services providers should be apologized for an inconvenience, frustrations should be acknowledged, and fast solutions should be done.
- 4- The E-money services provider must always work to maintain their credibility and dependability. That means completing tasks and requests right the first time. Customers appreciate staffs who call when they promise to call, follow up after sending information to see that it arrived, and inform them when they will not be able to carry out a request.
- 5- The bank staff can be failed to satisfy customer if the bank appears disorganized, dirty, or unprofessional. Automated Teller Machines (ATMs) must be clean and well lit; brochure racks must be well stocked and tidy. The attention to detail makes a clear and positive impression on customers.
- 6- Due to limited number of ATMs, the customers especially in urban areas dislike waiting in long lines. On the basis of these findings the bank should be increase the ATMs at a reputed public places and also in main markets.
- 7- Consumer wants and needs are not static, but constantly changing. An increase in consumers' personal disposable income and

changes in values have brought about a change in their lifestyles. This has affected the services of E-money. Thus the banks must monitor changes in the consumer behavior in order to improve their products and services and their distribution accordingly. By doing so, the customers will be highly satisfied. Highly satisfied customers tend to repeat purchasers, and it will much more expensive to generate a new customer than to provide additional service to an existing one. Satisfied customers are more loyal, thus less likely to stray to competitors and less price-sensitive than are customers who are not highly satisfied.

- 8- Technological advances not only will enhance the delivery of services to bank customers, but also will enable banks to do a better job of performance monitoring and evaluation. Bank executives should be turning their attention from short-term earnings concern to longer term marketing concern especially through service quality, sales effectiveness, and targeted marketing.
- 9- The effectiveness of E-money depends on effectiveness in consumer satisfaction, as it is the main objective of the service providers. The service provider must adopt appropriate techniques to collect information on consumers' satisfaction to adopt appropriate marketing strategies to keep abreast of the competition. Therefore the service providers of E-money must go for a regular consumer satisfaction survey to adopt an appropriate marketing strategy at the right time to enhance their effectiveness in satisfying the consumers.

- 10- To accomplish the organic growth, the banks should effectively manage and their influence customers by their regular and disciplined services. To grow organically, banks must capture the opportunities and concentrate on improving advocacy and growth potential. Measures such as cross sell, retention and acquisition of new customers, etc., help in achieving the agenda of E-money service providers. Banks must also focus on the changing customer's attitude.
- 11- The service provider of E-money should focus on its customers. Reputation of the service provider of E-money is important because of intangibility of the products it provides to its customers. The feeling of satisfaction of employees through satisfied customers enables them to contribute more. The service providers should maintain customer satisfaction level through service recovery.
- 12- Delivery channels should be increased so that the customers can transact their business with the bank at their convenience anywhere and at anytime of the day or night. Thus, the customers will have choice of transacting business through ATM, Internet Banking, Tele banking, Mobile banking or through plastic cards such as Credit Card, Debit Card, Smart Card etc., choice of his convenient time ATMs, Tele banking, Internet Banking and mobile banking are round the clock available and choice of his place. These can be accessed at multiple locations, including overseas locations.

13- As we know that rural population of India which more than 65% has a negligible penetration of internet banking for some reason or the other. Unless there is a political will to increase the base of the internet services among rural masses, this massive project remains a dream. However, the public sector banks with government banks have a large base among the rural masses and the public sector banks have a major role to play in spreading the internet usage among rural masses of India. This increase in the rural internet usage may help the government on the other fronts also like increase in literacy rate among rural areas which is a priority of the Government. This priority may be automatically touched with the spread of the internet usage in the rural areas.

14- The continuous encouragement to banks and customers is showing good progress in all the areas of electronic banking services. Now the banking industry needs catalysts to revolutionize the movement towards paperless electronic payment settlement system by

- Customer education.
- Training employees.
- Providing incentives for using EFT systems.
- Discouraging/penalizing use of paper-based fund transfer systems.
- Providing appropriate technology security.
- Providing insurance for genuine loss incurred by customers etc.

# **Bibliography**

## **Bibliography**

1. American Banker Association; "An Introduction to Bank Cards" The Bank Credit Card Business, Mac Millan Publications, New Delhi, India, 1996 & 2001.
2. Blackwell R.D., Miniard P.W. and Engel James F., "Consumer Behavior" Vikas Publishing House Ltd, New Delhi, India, 2003.
3. Desai Raghunath, "E-Banking", Srishti Book Distributors, New Delhi, India, 2007.
4. Dudija V.D., "Retail Business" Common wealth Publications, New Delhi, India, 2006.
5. Deva Vasu, "E-Commerce-A Manager's Guide" Commonwealth Publishers, Delhi, India, 2003.
6. Deva Vasu, "E-Banking" Commonwealth Publishers, Delhi, India, 2003.
7. Deva Vasu, "E-Services" Commonwealth Publishers, Delhi, India, 2003.
8. Diwan J.N., "Marketing Management" Common wealth Publications, New Delhi, India, 1999.
9. Goel Ritendra, "E-Commerce" New Age publications New Delhi, India, 2007.
10. Khan Matin, "Consumer Behavior" New Age publication New Delhi, India, 2004.
11. Kothari C.R., "Research Methodology" New Age publications New Delhi, India, 2004.
12. Kapoor D.C., "Marketing and Sales Management" S. Chand & Company Ltd, New Delhi, India, 2004.

13. Kotler Philip, "A Frame Work for Marketing Management" Pearson Education Private Limited, Delhi, India, 2003.
14. Kaptan S. S., "Credit Card in India" New concepts in banking, 2001.
15. Luck J. David and Rubin S Ronald, "Marketing Research" Prentice Hall of Indian New Delhi, India, 2003.
16. Naik C.N. & Reddy L.V., "Consumer Behavior" Discovery Publishing House, New Delhi, India, 1999.
17. Oberai Preeti, "Customer Relations" Sawrup & Sons Publications, New Delhi, India, 2002.
18. Patnaik U.C. & Chhatoi Basudev, "Bank Marketing" Sonali Publications, New Delhi, India, 2006.
19. Pezzullo Mary Ann, "Marketing Financial Services" The Indian Institute of Bankers, Macmillan Publication, Delhi, India.
20. Raju M.S. & Xardel Dominique, "Consumer Behavior" Vikas Publishing House Ltd, New Delhi, India, 2008.
21. Singh Yogesh kumar, "Fundamental of Research Methodology and Statistics" New Age International Publishers, New Delhi, India, 2006.
22. Sinha Arunabha, "Rural Consumer Behavior" Sonali Publications, New Delhi, India, 2005.
23. Schiffman Leon G. & Kanuk Leslie Lazar, "Consumer Behavior" Pearson Education Private Limited, Delhi, India, 2004.
24. Sharma Manoj, "Research Methodology" Anmol Publications Private Ltd, New Delhi, India, 2004.
25. Sharma K.K, "Statistics in Management Studies", Krishna Prakashan ltd, Meerut, India, 2003.



26. Swami Rama & Kumari Nama, "Marketing Management" Mac Million India Ltd, New Delhi, India, 1998.
27. Vohra Munish, "Consumer Behavior" Anmol Publications Private Ltd, New Delhi, India, 2006.

**Journal and Magazines:**

1. Banking Finance, Kolkata, India.
2. Chartered Financial Analyst: Indian Banking 2007-08, The ICFAI University Press, Hyderabad, India.
3. E-Business, A Monthly E-Business Digest, Delhi, India.
4. Finance India: The quarterly Journal of Indian Institute of Finance, Delhi, India.
5. Indian Journal of Marketing, New Delhi, India.
6. Journal of Marketing, New Delhi, volume 63, India.
7. Journal of Institute of Productivity & Management, Meerut, India.
8. Journal of Banking and Finance, Kolkata, India.
9. PNB Monthly Review, New Delhi, India.
10. Professional Banker: The ICFAI University Press, Hyderabad, India.
11. The ICFAI Journal of Marketing Management, India.
12. The ICFAI Journal of Bank Management, Hyderabad, India.
13. The Insurance Times, New Delhi, India.

**Websites:**

1. [www.rbi.org.in](http://www.rbi.org.in)
2. [www.google.com](http://www.google.com)
3. [www.pnbindia.com](http://www.pnbindia.com)
4. [www.statebankofindia.com](http://www.statebankofindia.com)
5. [www.hdfcbank.com](http://www.hdfcbank.com)
6. [www.icicibank.com](http://www.icicibank.com)



## Annexure 1

### Questionnaire/Schedule

Research Topic: *A Study of Consumer Behavior with special reference to Electronic Money in Bundelkhand Region of U.P.*

**Research Guide:**

*Dr. C.B. Singh*

Senior Lecturer,

Economics & Finance Dept

Bundelkhand University

Jhanshi, U.P.

**Research Scholar:**

*Mr. Shambhu Nath Singh*

Lecturer,

Economics & Finance Dept

Bundelkhand University

Jhanshi, U.P.

*(Note: - This survey has been carried out purely for academic purpose, we request you to be as frank as possible. The information provided by you will be kept confidential.)*

### Section (A)

1-Name of Consumer:-.....

Address:-.....

Age:-.....

Sex:- (A)- Male.

(B)-Female.

2-Educational qualification of consumer:-

(A)-High school

(B)-Intermediate

(C)-Graduate

(D)-Post Graduate

3-Monthly income of consumer:-

(A)-2000-10,000

(B)-10,000-20,000

(C)-20,000-50,000

(D)-50,000-1,00,000

4-Source of income/occupation of consumer:-

(A)-Govt./semi govt. service

(B)-Business

(C)-Profession

(D)-Farmer

5-How long are you living in Bundelkhand region?

(A)-By birth

(B)-During 5 years

(C)-During 10 years

(D)-More than 10 years

6-Do you have an account in a Bank?

(A)- Yes

(B) - No

7-In which Bank you have an account?

(A)-Public sector bank

(B)-Private sector bank

(C)-In both sector bank

(D)-No account

8-Why you have no account in a bank?

(A)- No knowledge about a/c.

(B)-Insufficient monthly income

(C)- Not interested

(D)-Initial deposit is high

9-How many times you visit to bank in a month?

(A)-Less than 5 times

(B)-Less than 10 times

(C)-More than 10 times

## Section (B)

*Kindly rate the following with regard to the services provided by your bank*

- 1- Customer guidance support (Advisory services, clarification of customer doubts)  
(A)-Excellent (B)-Very good (C)-Average (D)-Bad (E)-Very bad
- 2- The politeness and hospitality  
(A)-Excellent (B)-Very good (C)-Average (D)-Bad (E)-Very bad
- 3- Handling of customer complaints/Grievances  
(A)-Excellent (B)-Very good (C)-Average (D)-Bad (E)-Very bad
- 4- Method of imposing service charges, fines and penalties  
(A)-Excellent (B)-Very good (C)-Average (D)-Bad (E)-Very bad
- 5- Speed, promptness and accuracy in transactions  
(A)-Excellent (B)-Very good (C)-Average (D)-Bad (E)-Very bad
- 6- Confidentiality of account and transactions  
(A)-Excellent (B)-Very good (C)-Average (D)-Bad (E)-Very bad
- 7- Variety of services offered  
(A)-Excellent (B)-Very good (C)-Average (D)-Bad (E)-Very bad
- 8- Goodwill and reputation of the bank  
(A)-Excellent (B)-Very good (C)-Average (D)-Bad (E)-Very bad
- 9- The infrastructure facilities like E-payment, ATM, Credit card etc  
(A)-Excellent (B)-Very good (C)-Average (D)-Bad (E)-Very bad
- 10- Banks network and facilities to operate account from any part of the country/globe  
(A)-Excellent (B)-Very good (C)-Average (D)-Bad (E)-Very bad
- 11- Mobile banking, E-banking, internet banking and other latest technologies  
(A)-Excellent (B)-Very good (C)-Average (D)-Bad (E)-Very bad
- 12- Convenience in operating the account  
(A)-Excellent (B)-Very good (C)-Average (D)-Bad (E)-Very bad
- 13- Communication and providing prompt information (regarding customer account, Settlement of dues, availability of new services etc)  
(A)-Excellent (B)-Very good (C)-Average (D)-Bad (E)-Very bad
- 14- Customer care facilities provided by the service provider  
(A)-Excellent (B)-Very good (C)-Average (D)-Bad (E)-Very bad
- 15- E-money transactions more convenient than physical money transactions  
(A)-Strong Agree (B)-Agree (C)-Neutral (D)-Disagree (E)-Strong disagree
- 16- E-money is the best form of transactions  
(A)-Strong Agree (B)-Agree (C)-Neutral (D)-Disagree (E)-Strong disagree
- 17- E-money is the safest and the most secured system of transactions  
(A)-Strong Agree (B)-Agree (C)-Neutral (D)-Disagree (E)-Strong disagree
- 18- E-money service provider load many hidden charges  
(A)-Strong Agree (B)-Agree (C)-Neutral (D)-Disagree (E)-Strong disagree
- 19- Private players are providing better products in the area of E-money services than Public sector players  
(A)-Strong Agree (B)-Agree (C)-Neutral (D)-Disagree (E)-Strong disagree
- 20- Anytime, Anywhere, the services of E-money can be used  
(A)-Strong Agree (B)-Agree (C)-Neutral (D)-Disagree (E)-Strong disagree

### Section(C)

- 1- Are you aware about internet banking?  
(A)- Yes (B) - No
- 2- Are you aware about E-money?  
(A)- Yes (B) - No
- 3- Do you have knowledge about plastic cards?  
(A)- Yes (B) - No
- 4- Which types of E-money are you use?  
(A)- Debit card (B) - Credit card  
(C)- Cash card (D) - E-Recharge  
(E)- Petro card (F) - All the above
- 5- Why do you use E-money?  
(A)- For saving the time (B) - Unavailability of cash money  
(C)- Due to fast services (D) - Easy and safe to use
- 6- Do you prefer transactions through E-money?  
(A)- Yes (B) - No
- 7- Do you want to know about the services of E-money provided by the banks?  
(A)- Yes (B) - No
- 8- Do you feel the plastic cards is successful in replacing the traditional mode of Payments?  
(A)- Yes (B) - No
- 9- Which mode of payment do you prefer?  
(A)-E-payment (B) - Traditional
- 10- Why do you use E-money?  
(A)- For money transfer (B) - For E-payment (C) - Both A&B
- 11- Why do you use E-payment for?  
(A)- Retail purchase (B) - Consumer durables  
(C)- As a recharge coupon for different facilities (D) - All the above
- 12- Frequency of usages on monthly basis  
(A)- Increasing (B) - Decreasing
- 13- Do you use ATM card for inter-bank transactions?  
(A)- Yes (B) - No
- 14- Do you use Debit card/Credit card for multipurpose?  
(A)- Yes (B) - No
- 15- Which is the best E-payment mode in your opinion?  
(A)- Debit card (B) - Credit card
- 16- Do you feel the usages of debit card has overcome the delayed process of cheque Clearance?  
(A)- Yes (B) - No
- 17- Do you feel usages of the debit card have facilitated?  
(A)- Convenience (B) - Lower cost  
(C)- Enhancing (D) - All the above

- 18- Do you prefer use SMS facility for E-payment?  
(A)- Yes (B) – No
- 19- Are you aware about PIN (Personal Identification Number)?  
(A)- Yes (B) - No
- 20- Use E- money for  
(A)- Shopping (B) – Fund transfer  
(C)- Demand draft (D) - Payment for different kinds of services  
(E)- Others (F) - All the above
- 21- Among the various services availed most popular purpose of E-payment is  
(A)- Reservations (B) – Telephone Recharges  
(C)- Television Recharges (D) – Others
- 22- Are you satisfy with the different forms of E-money?  
(A)- Yes (B) - No
- 23- Are you satisfy with the services provider in this area?  
(A)- Yes (B) – No
- 24- I am more satisfy with the services provided by  
(A)- Private players (B) – Public players

*Thanks for your kind cooperation.*

*(Signature of Respondent)*

**Annexure 2**  
**Institute of Economics & Finance**  
**Bundelkhand University, Jhansi. (UP)**

Dear Sir Madam,

I am a Ph.D. student doing research in the field of Consumer Behavior towards E-Banking services. I request to you kindly spend 10-15 minutes in answering this questionnaire. Please be frank and fair while filling up the questionnaire. Sir, I assure you that the information supplied by you will be kept strictly confidential and used exclusively for research purposes.

Kind regards and best wishes.

Shambhu Nath Singh

Research Scholar

**Name of the Bank :** .....

(1)- This bank was established in Jhansi district in.....

(2)- This bank has started the services of E-banking from.....

(3)- Total number of account holders in this bank are.....

(4)- **Services Offered by Bank**

Facilities	Do you have?		No. of Users	Services charges	Annual fee(Rs.)
	Yes	No			
ATM card	Yes	No			
Debit card	Yes	No			
Credit card	Yes	No			
Telephone Banking	Yes	No			
Internet Banking	Yes	No			
Cell phone Banking	Yes	No			
Bills payment	Yes	No			
Electronic funds transfer services	Yes	No			
Investment Advisory services	Yes	No			
Multi city cheques	Yes	No			
Depository services	Yes	No			
CBS facility all branch	Yes	No			

(5)- Are customers fully aware about the E-banking services offered by the banks?

(A)-Yes (..... %) (B)- No (..... %)

If No, Why.....

(A)-Illiteracy

(B)-Lack of Advertisement

(C)-Lack of sufficient knowledge

(D)-If any other, Please specify.....

.....  
(6)-Are customers satisfied with the confidentiality of their bank account and financial transactions?

(A)-Yes (..... %) (B)- No (..... %)

If No, Please specify.....

(7)-Are customers using most of the E-banking services offered by the bank?

(A)-Yes (..... %) (B)- No (..... %)

If No, Please specify.....

(8)- Are customers willing to take the E-banking services?

(A)-Yes (..... %) (B)- No (..... %)

If No, Please specify.....

(9)-Are customers fully satisfied with the E-banking services?

(A)-Yes (..... %) (B)- No (..... %)

If No, Why.....

(A)-Due to technical problems

(B)-Limited numbers of ATMs

(C)-Lack of civic sense

(D)-Lack of computer literacy

(E)- If any other, Please specify.....

.....  
(10)-Customers using the services of E-banking.

(A)-Due to fast services (B)-Easy and safe to use

(C)-for saving the time (D)-No time bar in banking transactions

(E)- All of the above

Thanks for your kind cooperation.

Signature of Manager.